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FOREST INCREMENT IN NORTH IDAHO

by

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Forest & Range
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IN

NORTH IDAHO

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L. J. Cummings and Paul D. Kemp[1/]

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INDEX

	Page
Introduction	1
Findings in Brief	2
Basic Inventory Data	3
Special Increment Study	11
Net Forest Increment	14
Comparison of Net Increment and Drain	21
Potential Annual Increment	24
Measures Designed to Increase Increment	27
Appendix	30
Forest Type Definitions	73

LOCATION OF AREA
IN THE NORTHERN REGION

FIGURE 1

FOREST INCREMENT IN NORTH IDAHO

Introduction

This report shows the forest increment for North Idaho as calculated by the Forest Survey in the Northern Rocky Mountain Region. As considered in this report North Idaho includes that portion of the region shown in figure 1.

The increment figures hereafter presented are derived from (a) basic data of the inventory phase of the survey showing forest area according to various classifications and (b) a special increment study carried on during 1935 to 1939. Increment statistics are shown by ownership class, forest type, and stand class for the area as a whole and for each of the ten[2/] constituent counties. Increment data are based on forest classifications and ownerships as of the date of survey;[3/] no adjustments were made for subsequent logging, fire damage, restocking, or change in ownership. Subsequent analyses indicate, however, that the annual increment for the state as a whole has changed little during the period since date of survey. Owing to the small area occupied by hardwood stands - approximately 15 thousand acres of northern black cottonwood - forest increment was determined only for the coniferous stands. Hereafter in this report, with the exception of tables 15 and 16 and the Findings in Brief chapter, the term "forest land" includes only the unreserved commercial[4/] forest land.

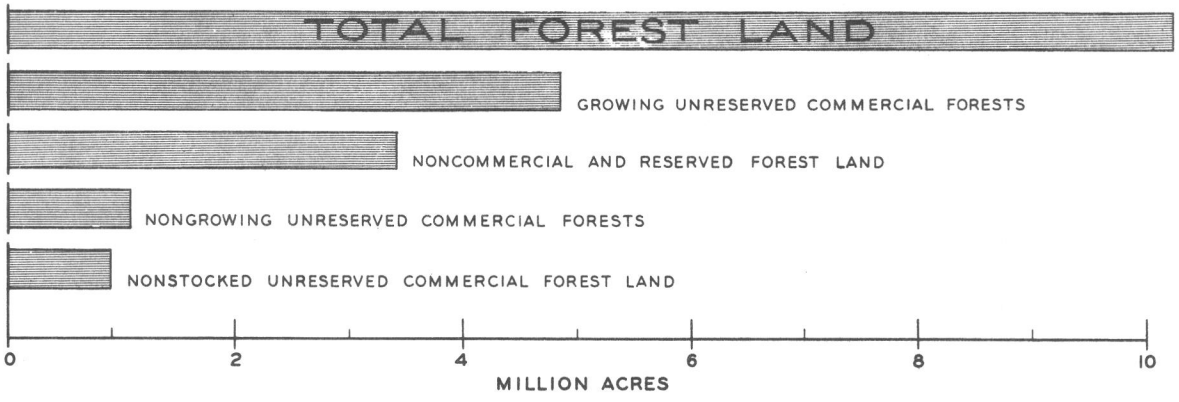
2/ The study covers only the portion of Idaho County within the defined area shown in figure 1.

3/ The field survey of North Idaho was started in 1932 and completed in 1936. The January 1 nearest to date of survey for the individual counties is as follows: 1933, Benewah County; 1934, Kootenai County; 1935, Bonner, Latah, and Shoshone Counties; 1936, Boundary, Idaho, Clearwater, Lewis, and Nez Perce Counties.

4/ The term "unreserved commercial" as used throughout the text is synonymous with "available zone 1 and zone 2," as used in tables 11 to 52, excluding tables 15 and 16 of the appendix. "Available" refers to unreserved forests as distinguished from those included in state parks, and national forest primitive and natural areas that are reserved from commercial forest-product cutting by statute or policy; "zones 1 and 2" refer to lands from which forest products can be utilized economically under present or reasonably conceivable future conditions.

Findings in Brief

The total land area in North Idaho is approximately 13 million acres, of which more than 10 million is forest land. Of this, almost half is now unreserved commercial forest in a growing status; the remainder: (1) is noncommercial or reserved from cutting, (2) supports mature timber where death and decay are assumed to balance increment, or (3) is nonstocked as a result of fire and cutting.



The current annual increment in growing unreserved commercial forests amounts to 636 million board feet, of which 165 million board feet or 26 percent is white pine.

Current annual drain of timber from the commercial forest (both growing and nongrowing) averages 712 million board feet, of which 366 million or 51 percent is white pine.

The current annual drain of all species is seen to be somewhat in excess of the total current increment; the corresponding unbalance in the case of white pine, the region's most important single species, is truly alarming. However, through application of more effective fire protection measures, through proper timber cutting practices, and through the application of measures to secure relatively prompt restocking of nonstocked lands, the current increment could ultimately be increased from 636 million board feet to 1,607 million board feet.

Basic Inventory Data

In the course of the inventory forest lands were classified and mapped in the field according to the forest types defined on pages 73 and 74 of the appendix. Stocked lands were further classified according to each of the principal factors affecting forest increment - age, site quality, and degree of stocking - and nonstocked lands according to site quality and latest forest type to occupy the area.

The age of coniferous forest stands up to 160 years was recorded by 20-year intervals; a 40-year interval was used between 160 and 200 years; all older stands were grouped in one class. The age of uneven-aged stands was determined by the predominating age class. Table 1 shows that young stands predominate in the forests of North Idaho; only 14 percent of the area is occupied by stands older than 200 years. Approximately 46 percent of the stocked forest area and 49 percent of the area of white pine forests is occupied by stands less than 61 years of age. There is a notable shortage, however, of 61- to 100-year stands. With respect to all age classes combined, white pine forests occupy approximately 41 percent, ponderosa pine forests 23 percent, and larch-Douglas-fir forests 17 percent, of the stocked forest area. It should be observed, however, that this predominance of white pine and ponderosa pine forests has resulted, in part, from the fact that as little as 15 and 25 percent, respectively, of the stand volume in these species allowed the stand to be classified as white pine or ponderosa pine.

Site quality is the relative capacity of land to produce wood, and is chiefly affected by climate, soil, and topography. It was determined on the basis of the average height and average age of dominant and codominant

Table 1. - Area of unreserved commercial forests in North Idaho classified according to forest type and age class (date of survey, 1932-36)

Forest type [1/]	Age class - years											
	1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	161-200	201+	Total	
	Thousand acres											Percent
Western white pine	557	348	291	102	80	259	221	126	177	299	2,460	41
Ponderosa pine	90	216	239	74	57	60	69	94	195	253	1,347	23
Larch-Douglas-fir	121	200	185	92	61	41	79	84	76	89	1,028	17
Hemlock-white fir	1	7	7	4	4	9	13	18	23	47	133	2
Douglas-fir	13	45	81	21	22	28	35	41	17	12	315	5
Engelmann spruce	4	4	8	4	2	6	7	8	27	57	127	2
Lodgepole pine	85	93	60	37	17	17	5	6	3	1	324	6
Western red-cedar	1		1	1	1	1	2	1	3	35	46	1
Cedar-white fir	22	12	19	8	9	13	19	28	13	27	170	3
All types	894	925	891	343	253	434	450	406	534	820	5,950	
Percent	15	16	15	6	4	7	7	7	9	14		100

1/ Forest types are defined on pages 73 and 74.

trees according to the procedures used in normal yield studies.[5/] Table 2, which classifies the forest area according to site, also shows: (a) stocked areas, which correspond with the total areas by types in table 1, and (b) nonstocked areas. These nonstocked areas, aggregating 903 thousand acres, include deforested burns and nonstocked areas cutover prior to 1925, and approximately 98 thousand acres clearcut between 1925 and the date of mapping that were not classified as to restocking conditions.

Table 2 shows that 47 percent of the total area of 6,853,000 acres is of median site quality (site III), that 32 percent is of better-than-median site quality (sites I and II), and that 21 percent is of poorer-than-median quality (sites IV and V). The corresponding percentages for the white pine type are: 39 percent, 58 percent, and 3 percent. The relative productivity of lands in the several site classes is shown in table 9. By way of further illustration, yields of dense stands of 100-year-old white pine of median site average about 19 thousand board feet per acre by Scribner rule, and the taller trees average approximately 100 feet in total height. It is noteworthy that of the 351 thousand acres of white pine type classified in table 2 as site I, only 17 percent is national forest land.

Degree of stocking, or the extent to which an area's productivity is utilized by the forest stand, was arbitrarily determined on a volume basis in sawtimber stands, and on the basis of number of trees in pole,

5/ For areas classified as western white pine, hemlock-white fir, Engelmann spruce, western redcedar, and cedar-white fir, site quality classes I to V correspond respectively with site indexes 70, 60, 50, 40, and 30 as defined in U.S.D.A. Tech. Bul. 323; and ponderosa pine with site indexes 127, 112, 94, 77, and 64 as defined in U.S.D.A. Tech. Bul. 630. Site quality standards for larch-Douglas-fir and Douglas-fir types are from an unpublished manuscript of the Northern Rocky Mountain Forest and Range Experiment Station and for lodgepole pine from U.S.D.A. Bul. 154. (See also footnotes to table 4, page 15.)

Table 2. - Area of unreserved commercial forest lands in North Idaho classified according to site class and stocking condition (date of survey, 1932-36)

Forest type and stocking condition1/	National forest land Site class						Land other than national forest Site class					
	I	II	III	IV	V	Total	I	II	III	IV	V	Total
	Thousand acres						Thousand acres					
Western white pine												
Stocked	48	513	607	35	--	1,203	260	647	314	36	--	1,257
Nonstocked	10	126	175	16	--	327	33	120	81	7	--	241
Ponderosa pine												
Stocked	--	7	131	150	4	292	--	20	476	542	17	1,055
Nonstocked	--	--	18	22	1	41	--	2	35	61	3	101
Larch-Douglas-fir												
Stocked	1	41	341	65	2	450	2	84	367	104	21	578
Nonstocked	--	4	30	6	--	40	--	5	27	6	1	39
Hemlock-white fir												
Stocked	--	2	44	54	1	101	--	9	18	5	--	32
Nonstocked	--	--	1	--	--	1	--	--	--	--	--	--
Douglas-fir												
Stocked	--	1	66	85	37	189	--	3	32	67	24	126
Nonstocked	--	--	9	19	12	40	--	--	1	8	2	11
Engelmann spruce												
Stocked	--	30	47	13	--	90	1	15	19	2	--	37
Nonstocked	--	2	3	1	--	6	--	--	2	--	--	2
Lodgepole pine												
Stocked	1	81	141	10	--	233	3	28	54	6	--	91
Nonstocked	--	4	9	1	--	14	--	--	1	--	--	1
Western redcedar												
Stocked	1	13	14	1	--	29	--	8	8	1	--	17
Nonstocked	--	--	2	--	--	2	--	1	1	--	--	2
Cedar-white fir												
Stocked	--	42	60	3	--	105	--	37	26	2	--	65
Nonstocked	--	17	14	--	--	31	--	1	3		--	4
All types												
Stocked	51	730	1,451	416	44	2,692	266	851	1,314	765	62	3,258
Nonstocked	10	153	261	65	13	502	33	129	151	82	6	401
Grand total	61	883	1,712	481	57	3,194	299	980	1,465	847	68	3,659

1/ Nonstocked forest lands are (1) areas that were less than 10 percent stocked at the time of mapping, and (2) areas clearcut since 1925 that were not classified as to re-stocking conditions at the time of mapping, 1932-1936.

seedling and sapling stands. In sawtimber stands the range of volumes for the three degrees of stocking is shown in the following tabulation:

Degree of stocking	Ponderosa pine and lodgepole pine types	All other forest types
	Thousand board feet per acre	
Well	13 plus	20 plus
Medium	7 - 12	10 - 19
Poor	3 - 6	4 - 9

Stands containing less than the minimum 3 or 4 thousand board feet per acre that could not be classified either as pole or seedling and sapling stands because of the lack of an understory were called "nonstocked."

In pole, and seedling and sapling stands, degree of stocking was arbitrarily based on the proportion of 13.2-foot[6/] quadrats stocked with at least one well-established tree. Stocking determinations were made either by establishing sample quadrats in a random fashion, or by experienced judgment periodically checked by quadrat establishment. Well-stocked stands are those found or judged to have 70 to 100 percent of the quadrats stocked. Medium, poor, and nonstocked stands are those having 40 to 69 percent, 10 to 39 percent, and less than 10 percent, respectively, of the quadrats stocked.

While theoretically a well-stocked stand, classified on the basis of 13.2-foot quadrats ($\frac{1}{250}$ acre), might have as few as 175 well-spaced trees per acre, under actual conditions the minimum generally was several times that number. Subsequent field studies show that white pine stands 1 to 60 years of age average approximately one thousand trees per acre for areas classified as well stocked, four hundred trees for medium-stocked areas,

6/ In ponderosa pine stands a 20.9-foot quadrat was used wherever the smaller quadrat did not contain a living tree and the 20.9-foot quadrat contained a tree larger than 5.9 inches d.b.h. (diameter at breast height).

and one hundred trees for poorly-stocked areas. Owing to the part-time use of the larger quadrat (20.9 feet) corresponding averages for ponderosa pine stands are somewhat lower.

For the more important forest types, figure 2 shows the percentage of area in each of the three stocking classes. According to survey standards, for example, 53 percent of the white pine type is well stocked, 32 percent is medium stocked, and 15 percent is poorly stocked.

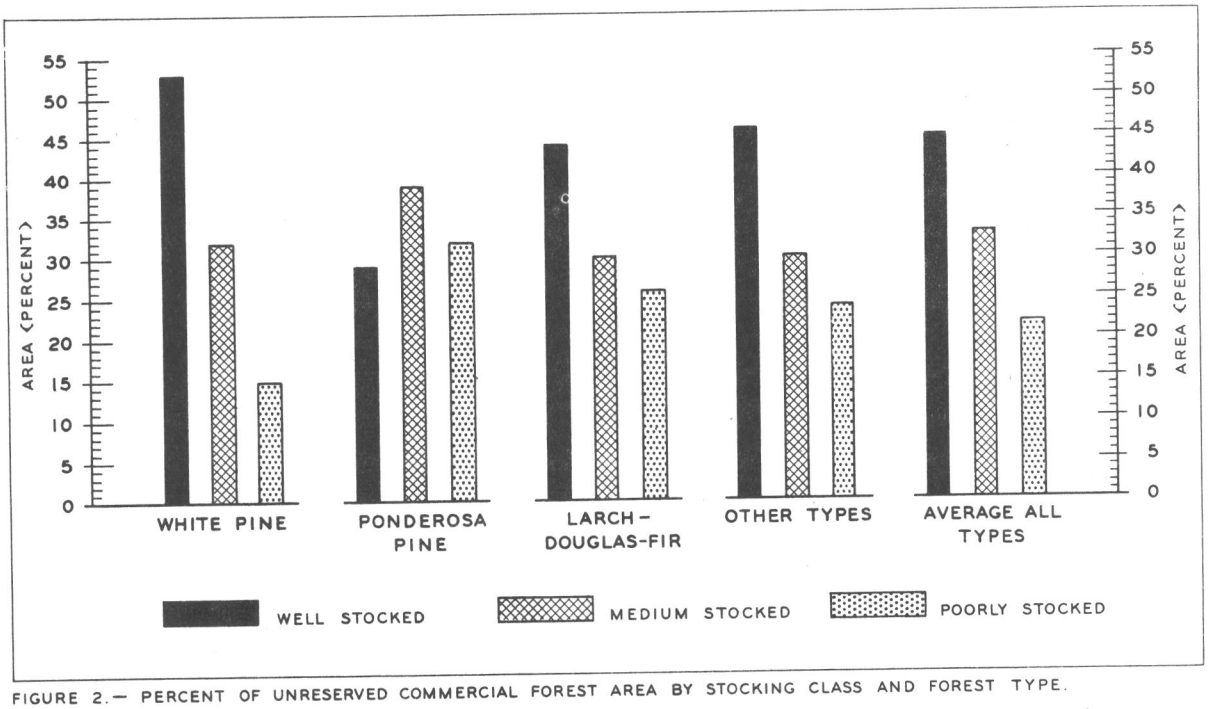


FIGURE 2.— PERCENT OF UNRESERVED COMMERCIAL FOREST AREA BY STOCKING CLASS AND FOREST TYPE.

For the purpose of calculating current increment the forests were arbitrarily classified as growing and nongrowing. Growing forests, all stands in which net current increment occurs, consist of all uncut ponderosa pine and larch-Douglas-fir stands less than 201 years of age, all partially cut stands of the same types regardless of age, and uncut stands of all other types less than 161 years of age. The term "uncut" refers to

sawtimber stands from which less than 10 percent of the stand volume has been cut and to all pole, and seedling and sapling stands regardless of whether they have developed following clear cutting and fire, or resulted from the cutting of a sawtimber overstory.

The nongrowing stands, in which it was assumed that growth is balanced by losses from mortality and decay, include uncut ponderosa pine and larch-Douglas-fir stands more than 200 years of age and all other stands more than 160 years of age. This category also includes some 43 thousand acres of partially cut sawtimber stands (chiefly western white pine, hemlock-white fir, and cedar-white fir) less than 160 years of age. Although some growth certainly occurs on this area, recent studies[7/] indicate that mortality in partially cut stands of these types offsets increment in surviving trees for a period of approximately 10 years after logging. Current annual increment, as shown in this report, has only been calculated for growing stands.

Table 3 shows that for national forests and for all other ownerships combined approximately 82 percent of the stocked forest land is occupied by growing stands and the remaining 18 percent is occupied by nongrowing stands. Reference to table 2 shows, however, that approximately 500 thousand acres of national forest and 400 thousand acres in other ownerships are in a nonstocked condition, so that growth actually is accruing on only 71 percent of the forest-land area. The classification of growing forests into sawtimber, pole, and seedling and sapling stands is shown in figure 3.

7/ Made in 1938 by the Division of Silviculture, Northern Rocky Mountain Forest and Range Experiment Station.

Table 3. - Area of unreserved commercial forests classified according to forest type, ownership, and growing condition, North Idaho (date of survey, 1932-36)

Forest type and ownership group	Growing forests		Nongrowing forests		Total
	Thousand acres	Percent[1/]	Thousand acres	Percent[1/]	Thousand acres
Western white pine					
National forest	1,000	83	203	17	1,203
Other forest	964	77	293	23	1,257
Ponderosa pine					
National forest	206	71	86	29	292
Other forest	897	85	158	15	1,055
Larch-Douglas-fir					
National forest	413	92	37	8	450
Other forest	547	95	31	5	578
Hemlock-white fir					
National forest	36	36	65	64	101
Other forest	20	62	12	38	32
Douglas-fir					
National forest	169	90	20	10	189
Other forest	114	90	12	10	126
Engelmann spruce					
National forest	35	39	55	61	90
Other forest	7	19	30	81	37
Lodgepole pine					
National forest	231	99	2	1	233
Other forest	89	98	2	2	91
Western redcedar					
National forest	4	14	25	86	29
Other forest	3	18	14	82	17
Cedar-white fir					
National forest	82	78	23	22	105
Other forest	37	57	28	43	65
All types					
National forest	2,176	81	516	19	2,692
Other forest	2,678	82	580	18	3,258

1/ Percentage of total unreserved commercial forest area in the given ownership group and type.

Special Increment Study

Normal yield tables showing volume, increment, and other stand data for densely stocked stands of given ages and sites were used for growth predictions. Normal yield tables for even-aged stands of ponderosa pine, white pine, larch-Douglas-fir, and lodgepole pine were available. Increment rates

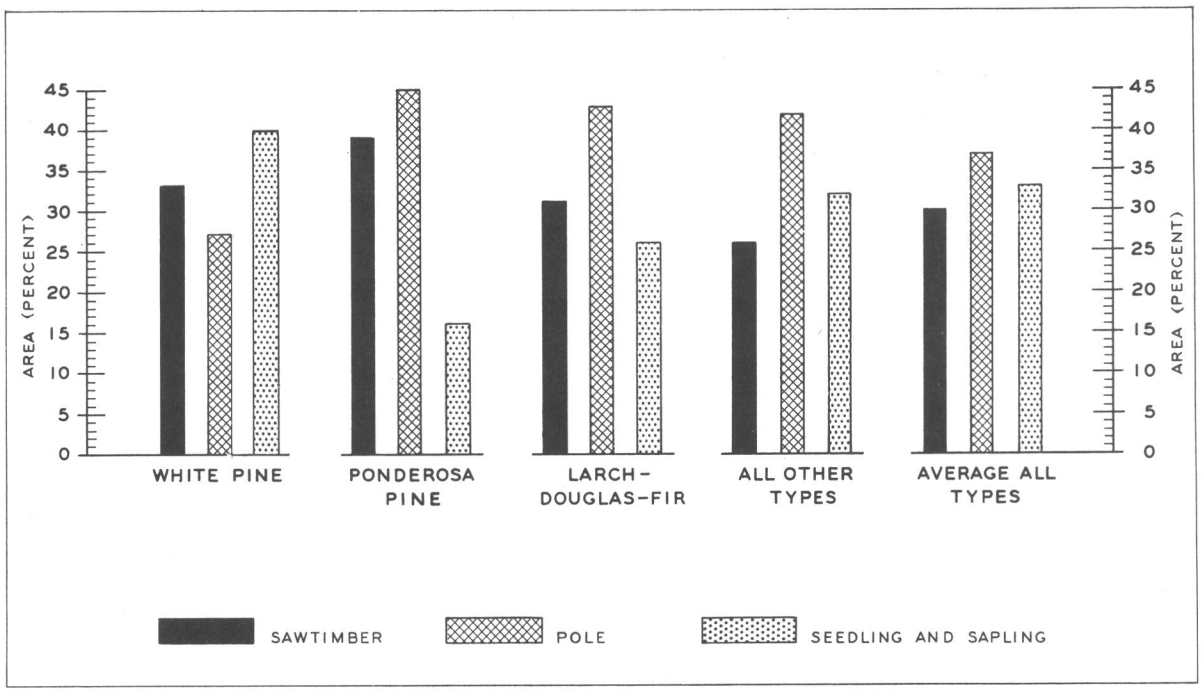


FIGURE 3. — PERCENT OF UNRESERVED COMMERCIAL FOREST AREA OCCUPIED BY GROWING SAWTIMBER, POLE, AND SEEDLING AND SAPLING STANDS.

for less important types such as hemlock-white fir and western redcedar were obtained from the white pine yield tables since these species usually are associated with white pine and occur in the stands on which the yield tables were based. Increment rates for selectively cut ponderosa pine[8/] and larch-Douglas-fir[9/] stands were obtained from the growth tables for selectively cut stands of these types.

8/ Meyer, W.H. Growth in selectively cut ponderosa pine forests of the Pacific Northwest. U.S.D.A. Tech. Bul. 407, 1934.

9/ Division of Silvics. Growth after logging of larch-Douglas fir stands in Northwestern Montana. Applied Forestry Notes No. 79, Northern Rocky Mountain Forest and Range Experiment Station, 1937.

Since normal yield tables apply only to fully stocked stands in which the crowns usually are touching, they cannot be applied directly to understocked or average stands, in the densest of which openings usually occur. The degree of stocking is generally determined by dividing the actual basal area of the given stand by the yield table basal area for the given site, type and age, expressing the result as a percentage. In the past it has generally been assumed that the growth of a given stand at any age is the product of this percentage and the corresponding normal yield table increment. The presence of small openings in average stands naturally provides greater growing space for individual trees and results in higher net growth rates than the basal-area stocking indicates. It is evident, therefore, that growth-prediction methods which ignore these higher net growth rates will result in an underestimate of actual increment in these stands.

In order to apply normal yield table increments properly, it was necessary to determine the average stocking percentage in terms of the normal yield table stocking. A special stocking correlation study indicates that the average white pine forest has only about one-half of the basal area per acre found in the normal forest of the same site and age class. Similarly the average ponderosa pine forest has only about one-third of the basal area per acre of the normal forest.

Special growth studies were made in the white pine and ponderosa pine types to determine the relationship between increment rates in normal and average stands. In these studies 272 fifth-acre sample plots were established in white pine and ponderosa pine types covering a wide range of stocking, age, and site conditions. The present volume on these plots

and the corresponding volume 20 years ago were accurately determined. The present volume was obtained by careful measurement of living trees. The volume 20 years ago was determined in two steps: (a) by subtracting the 20-year diameter growth from the present diameter of living trees and recalculating the volume of these trees at the beginning of the period, and (b) by adding to this the volume of all dead trees considered to have died during the 20-year period. For each plot the increment was determined by subtracting the volume 20 years ago from the present volume. The ratios of actual to normal increment - hereafter referred to as the increment normality ratio - were determined for each plot and were correlated with ratios of actual basal area to normal basal area.

Figure 4 shows graphically the relationship between actual average board-foot increment and normal board-foot increment for western white pine and ponderosa pine stands of various degrees of stocking. The practical

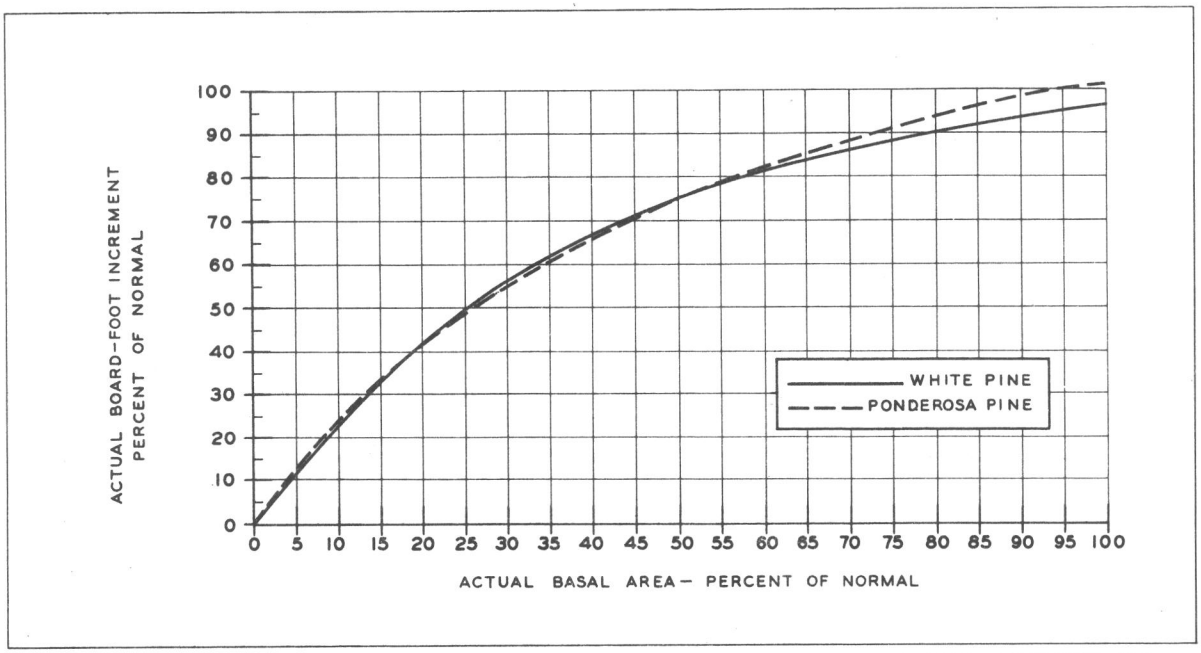


FIGURE 4.— RELATION OF ACTUAL AVERAGE BOARD-FOOT INCREMENT TO NORMAL BOARD-FOOT INCREMENT FOR STANDS OF VARIOUS DEGREES OF STOCKING (BASAL AREA BASIS.)

application of these curves in actual use is illustrated by the following example, for which the assumed conditions are as follows:

> Given a 1,000-acre tract of 80-year-old western white pine type on which a timber estimate has been made; the site is fair (i.e., site index 50); the average stocking on a basal-area basis is 50 percent of normal. According to the normal yield table,[10/] current annual increment for 80-year-old white pine stands on a fair site is 475 board feet per acre. Figure 4 shows the increment of a white pine stand that is 50 percent stocked to be 75 percent of normal. An estimate of the gross current annual board-foot increment on the given tract would therefore be 1,000 x .75 x 475 or 356 thousand board feet. To obtain an estimate of net increment this figure should be reduced by 5-10 percent to allow for such items as defect and breakage in logging.

In calculating the growth for North Idaho, the weighted average stocking percent was determined for each type. For each average stocking percent a gross increment normality ratio was read from curves similar to those shown in figure 4. These were in turn reduced by the cull-breakage factors shown in table 4 to arrive at the net increment normality ratios shown in the same table. These latter were in turn used to calculate the net annual forest increment.

Net Forest Increment

The net annual forest increment is the volume added by growth to the individual trees, plus the merchantable volume newly created by small trees developing into merchantable sizes, and minus the natural endemic losses due

10/ See footnote 2, table 4, page 15.

Table 4. - Ratio of actual to normal[1] board-foot increment by forest type and age class

Forest type	Age class	Cull factor	Actual gross increment in terms of normal increment	Actual net increment in terms of normal increment
		Percent		
Western white pine[2]	1-80	5		71
	81-120	7	75	70
	121-140	10		67
	141-160	13		65
Ponderosa pine[3]	1-120	4		58
	121-200	7	60	56
Larch-Douglas-fir and Douglas-fir[4]	1-120	6		66
	121-200	12	70	62
Hemlock-white fir[2]	1-80	5		66
	81-120	10	70	63
	121-140	20		56
	141-160	50		35
Engelmann spruce[2]	1-120	5		66
	121-160	8	70	64
Lodgepole pine[5]	1-160	5	50	47
Western redcedar[2]	1-120	15		42
	121-160	25	50	37
Cedar-white fir[2]	1-120	15		42
	121-160	35	50	32

1/ Normal growth rates for the various forest types were obtained from the following sources:

2/ Haig, I.T. Second-growth yield, stand, and volume tables for the western white pine type. U.S. Dept. of Agr. Tech. Bull. 323, 1932.

3/ Meyer, W. H. Yield of even-aged stands of ponderosa pine. U.S. Dept. of Agr. Tech. Bull. 632, 1938.

4/ Cummings, L. J. Larch-Douglas-fir yield tables. Unpublished manuscript, Northern Rocky Mountain Forest and Range Experiment Station, 1936.

5/ Mason, D. T. The life history of lodgepole pine in the Rocky Mountains. U.S. Dept. Agr. Bull. 154, 1915.

to shading, insects, diseases, and miscellaneous causes. This net increment represents, in a general way, the present annual cut - assuming no fire or epidemic losses - that can be made without reducing the volume of the growing stock.

The increment in North Idaho was obtained by multiplying the forest area in the given forest type, age class, and site times the appropriate net percentages from table 4 times the normal growth for given forest types, age classes, and sites. The areas of forest types, age classes, and sites were taken from the inventory phase of the survey, and represent field conditions as of the period 1932-1936. Since that period cutting has been the principal factor tending to change this increment and wherever subsequent cutting has not occurred these increments are still approximately correct.

The total annual board-foot increment on forest areas, amounting to 636 million board feet or 266 million cubic feet (table 5), greatly exceeds all previous published estimates. It should be emphasized, however, that this increment is exclusive of fire, which during the period 1931-1937 averaged 91 million board feet per year. Furthermore, not all of this increment occurred in stands now merchantable; some of it occurred on sawtimber trees in pole, seedling and sapling stands that presumably will be economically loggable when the young stands reach the sawtimber class.

Of the total board-foot increment 54 percent, or 344 million board feet, is produced in the white pine type. This type, certainly the most important in North Idaho, shows the highest average annual increment per acre - 175 board feet. Next in importance is the ponderosa pine type which contributes 21 percent, and larch-Douglas-fir which contributes 15 percent of the annual board-foot increment. The annual increment per acre of all growing

Table 5. - Annual increment by forest type on unreserved commercial forest land, North Idaho

Forest type	Area[1]	Annual increment[2]			
		Total		Average per acre[3]	
	Thousand acres	Million board feet	Million cubic feet	Board feet	Cubic feet
Western white pine	1,964	344.1	137.6	175	70
Ponderosa pine	1,103	134.5	41.8	122	38
Larch-Douglas-fir	960	96.7	53.1	101	55
Hemlock-white fir	56	7.5	3.5	134	62
Douglas-fir	283	20.2	13.2	71	47
Engelmann spruce	42	7.2	2.8	171	67
Lodgepole pine	320	11.9	8.5	37	27
Western redcedar	7	1.2	.4	156	52
Cedar-white fir	119	13.1	5.6	110	48
Total or average	4,854	636.4	266.5	131	55

1/ Growing stands only.

2/ Board-foot increment is shown for all white pine, ponderosa pine, lodgepole pine, and cedar trees larger than 11 inches d.b.h. and for trees of all other species larger than 13 inches d.b.h. Estimated in 16-foot logs by Scribner rule, to a useable top diameter, 6-12 inches depending upon limbiness. Cubic-foot increment inside bark, from stump to tip, is shown for all trees 0.6 inch or more in d.b.h. To determine the cubic-foot increment from stump to a 4.0-inch top inside bark for trees larger than 5.0 inches d.b.h. reduce the increment in tables 13 and 14 of the appendix by the following percentages: sawtimber stands by 1 percent; pole stands by 25 percent; seedling and sapling stands by 55 percent.

3/ The averages have been calculated from detailed area and volume data shown in tables 11, 12, 13, and 14. Owing to the rounded figures used in the above table, the averages may not agree exactly with those obtained by dividing the figures in columns 2 or 3 by the figures in column 1.

stands, ranging from seedling to mature, averages 131 board feet or 55 cubic feet. For further detailed information on annual increment by species, forest type, and stand class the reader is referred to tables 11-14 in the appendix.

A comparison of cubic-foot and board-foot growth rates per acre shows a ratio of 2.4 board feet per cubic foot. This low ratio is due to the fact that, since about two-thirds of the growing forest area is occupied by stands less than 81 years old, a large part of the cubic-foot growth is in trees less than sawtimber size. Seedling and sapling stands with an average age of about 20 years, for example, have a board foot-cubic foot growth ratio of .024 to 1., the board-foot volume in such stands being found in occasional residual or precocious trees. Pole stands with an average age of about 60 years have a corresponding growth ratio of 1.5 to 1., and sawtimber stands have a ratio of 5.9 to 1.

Table 6 shows estimates of forest increment for two principal forest types, three stand classes, and for national forest lands separate from other forest lands. Approximately 45 percent of the growing forest area is national forest land, but only 38 percent of the total board-foot increment occurs there. This is, in part, due to the fact that the national forests in comparison with other ownerships, have a smaller proportion of their growing forest area in the better sites. As a result of this and other factors, national forest growth rates are estimated to be on an average 36 board feet per acre lower than those of other forest lands. It is noteworthy that the annual increment in growing sawtimber stands - i.e., those less than 161 years of age - of the white pine type averages 422 board feet per acre for national forest lands and 448 board feet per acre for other forest lands. It should again be emphasized that these increments assume no fire or other epidemic losses.

Table 6. - Annual increment by ownership class, forest type, and stand class, on unreserved commercial forest stands, North Idaho

Ownership class, forest type, and stand class	Area[1]	Annual increment			
		Total		Average per acre	
	Thousand acres	Million board feet	Million cubic feet	Board feet[2]	Cubic feet[3]
National forest land					
Western white pine					
Seedling and sapling	469	--	13.5	--	29
Pole	277	29.2	33.2	105	120
Sawtimber	254	107.4	18.2	422	72
Ponderosa pine					
Seedling and sapling	31	.2	1.9	5	61
Pole	43	7.2	2.0	167	47
Sawtimber	132	17.1	2.1	129	16
All other types					
Seedling and sapling	304	.7	12.4	2	41
Pole	384	28.2	22.4	74	58
Sawtimber	282	52.6	10.0	187	35
Total or average	2,176	242.6	115.7	111	53
All other land					
Western white pine					
Seedling and sapling	319	--	13.2	--	41
Pole	256	33.0	31.1	129	122
Sawtimber	389	174.4	28.4	448	73
Ponderosa pine					
Seedling and sapling	147	.5	8.7	3	59
Pole	450	70.3	22.0	156	49
Sawtimber	300	39.4	5.1	131	17
All other types					
Seedling and sapling	209	.1	9.9	1	48
Pole	380	35.7	23.8	94	62
Sawtimber	228	40.4	8.6	177	38
Total or average	2,678	393.8	150.8	147	56

1/ Growing stands only.
2/ Derived from detailed tables 11 and 12.
3/ Derived from detailed tables 13 and 14.

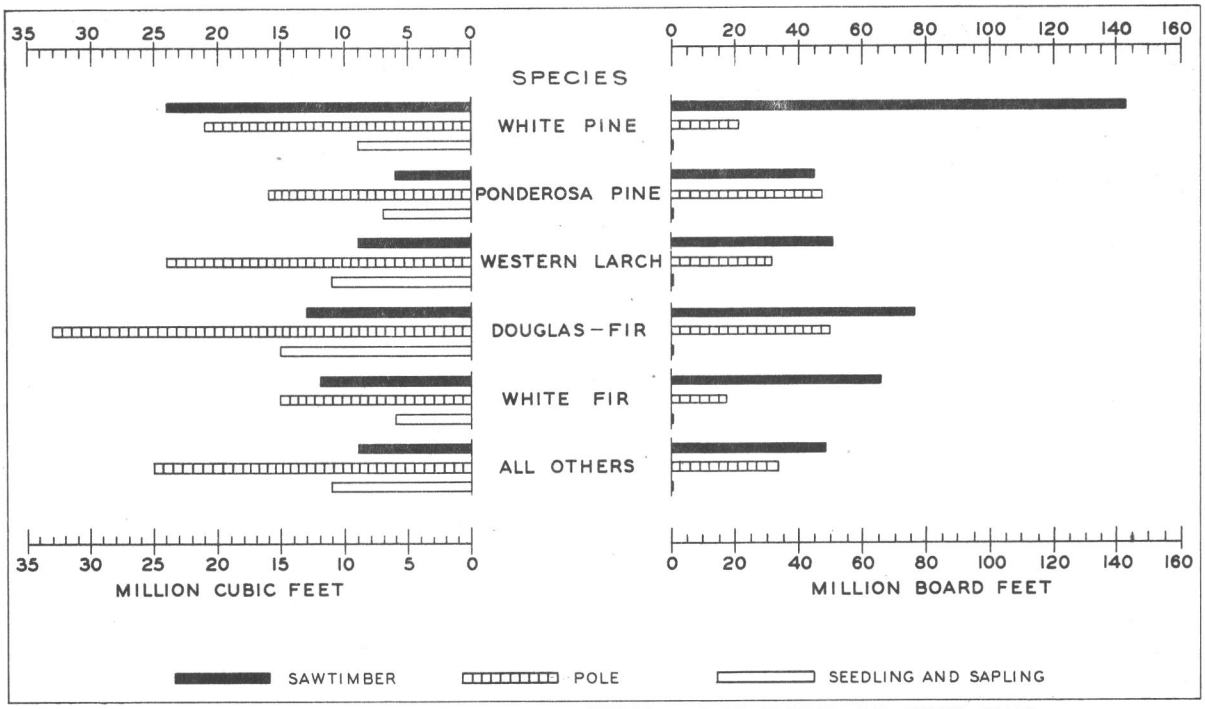


FIGURE 5.—ANNUAL INCREMENT ON UNRESERVED COMMERCIAL FOREST LAND BY SPECIES AND STAND CLASS

Figure 5 shows the increment by principal species in contrast with tables 5 and 6 where it is classified by forest type but not by species. From the point of view of board-foot increment, white pine, with an annual increase of 165 million board feet, tops the list of species. Of this white pine increment 87 percent occurs in sawtimber stands. Furthermore, 96 percent occurs in the white pine type. On a cubic-foot basis Douglas-fir is the leader because of its wide distribution in pole, seedling and sapling stands of all important types. It is not a leader in sawtimber stands because in this region the species is relatively short-lived and often begins to drop out of the stand at about 100 years of age. In comparison with most other species there is relatively more cubic volume of western larch than board-foot volume. This is probably due to the fact that western larch is more widely distributed in pole, seedling and sapling stands than in sawtimber stands.

Figure 6 shows the current increment by ownership and principal species. For those interested in more detailed information regarding annual increment by ownership class, species, county, and type, tables 15 through 52 are given in the appendix, pages ~~25~~ 35 to ~~60~~ 72.

Comparison of Net Increment and Drain

According to table 7 the annual drain of material from the forests of North Idaho, including both growing and nongrowing stands, averages 712 million board feet. This represents the fire drain for the period 1931-1937 and cutting drain, in general, for the period 1935-1938. The average annual drain is about 12 percent greater than the increment on growing stands, which is 636 million board feet. In the case of white pine the average annual drain of 366 million board feet is 122 percent greater than the corresponding increment of 165 million board feet. This is truly an alarming situation with respect to North Idaho's most important timber species.

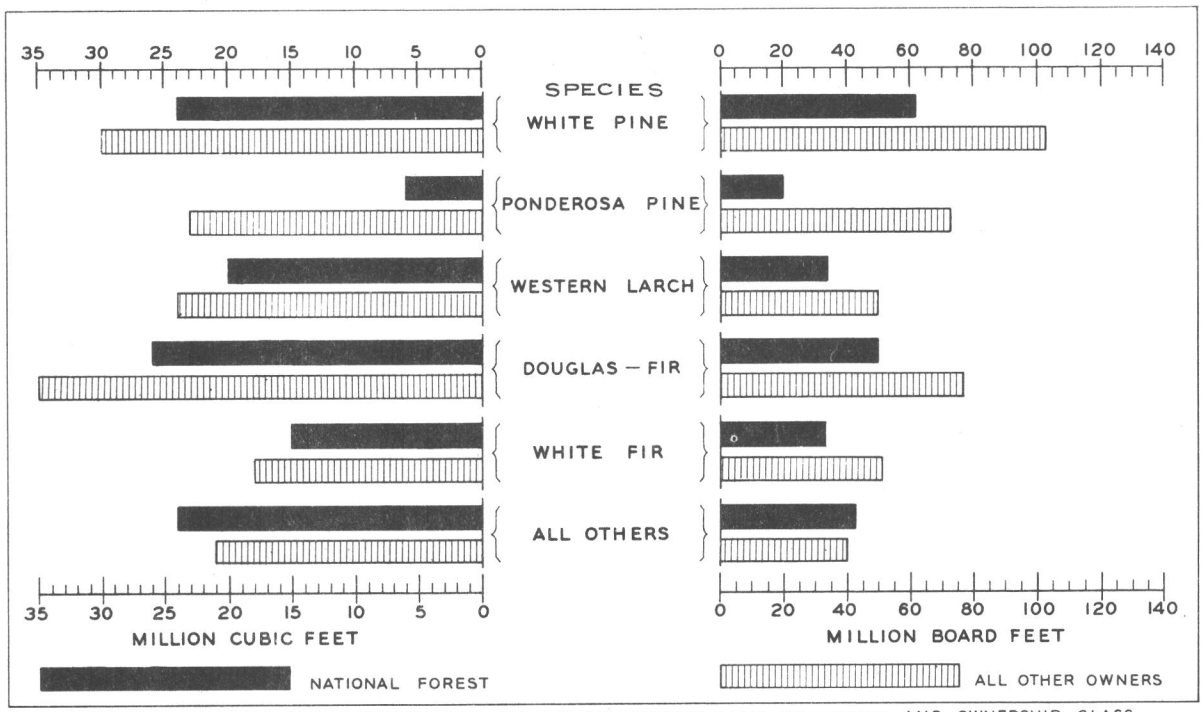


FIGURE 6.— ANNUAL INCREMENT ON UNRESERVED COMMERCIAL FOREST LAND BY SPECIES AND OWNERSHIP CLASS.

Table 7. - Comparison of average annual board-foot drain and increment for unreserved commercial forest lands, North Idaho

Species	National forest land					Land other than national forest				
	Average annual drain			Annual increment	Relation of drain to increment	Average annual drain			Annual increment	Relation of drain to increment
	Cutting[1]	Fire[2]	Total			Cutting[1]	Fire[2]	Total		
	Million board feet Scribner rule[3]				Percent	Million board feet Scribner rule[3]				Percent
Western white pine	34.3	10.6	44.9	62.4	72	316.4	4.7	321.1	102.5	313
Ponderosa pine	1.4	4.8	6.2	20.4	30	94.8	4.1	98.9	72.3	137
Western larch	2.5	5.8	8.3	34.4	24	36.8	4.6	41.4	49.3	84
Douglas-fir	2.7	13.2	15.9	49.5	32	51.2	6.1	57.3	76.8	75
White fir	.6	13.7	14.3	33.3	43	19.6	3.0	22.6	51.0	44
Western redcedar[4]	5.9	6.2	12.1	11.7	103	47.1	5.0	52.1	15.6	334
Western hemlock	.4	2.0	2.4	5.0	48	2.4	0.8	3.2	4.3	74
Engelmann spruce	.9	4.7	5.6	13.9	40	4.5	0.5	5.0	10.5	48
Lodgepole pine	--	.7	.7	11.0	6	--	0.5	0.5	11.1	5
Mountain hemlock	--	--	--	5/	--	--	--	--	5/	--
Alpine fir	--	--	--	1.0	--	--	--	--	.4	--
Total	48.7	61.7	110.4	242.6	46	572.8	29.3	602.1	393.8	153

1/ Average annual 1935-1938 sawlog drain and 1937 minor-products drain.
2/ Average annual 1931-1937, inclusive, no allowance being made for salvage.
3/ Volumes refer only to trees of sawtimber size, more than 11 or 13 inches in d.b.h.
4/ Includes the volume of cedar pole trees.
5/ Less than 100,000 board feet.

In interpreting the increment and drain figures in table 7 and figure 7 it should be noted that no allowance was made for the salvage of fire-killed timber, some of which certainly was used. Also, the relatively large national forest fire losses are chiefly due to the heavy damage sustained during 1931 and 1934. These fire losses, both national forest and other, are probably the maximum that are likely to occur on an average in the immediate future. As a matter of fact, the fire losses since the completion of the survey in North Idaho have been very much less. In appraising the present increment-drain situation it must also be remembered that more than a million acres of commercial forest land bear mature, nongrowing stands. When these lands have become productive following cutting, their increment will go far toward removing the deficit of all species, but will not be likely to overcome the unbalance of increment and drain in white pine.

Table 7 also shows that drain from all causes on the national forest lands is only 46 percent of increment. Even in the case of western white

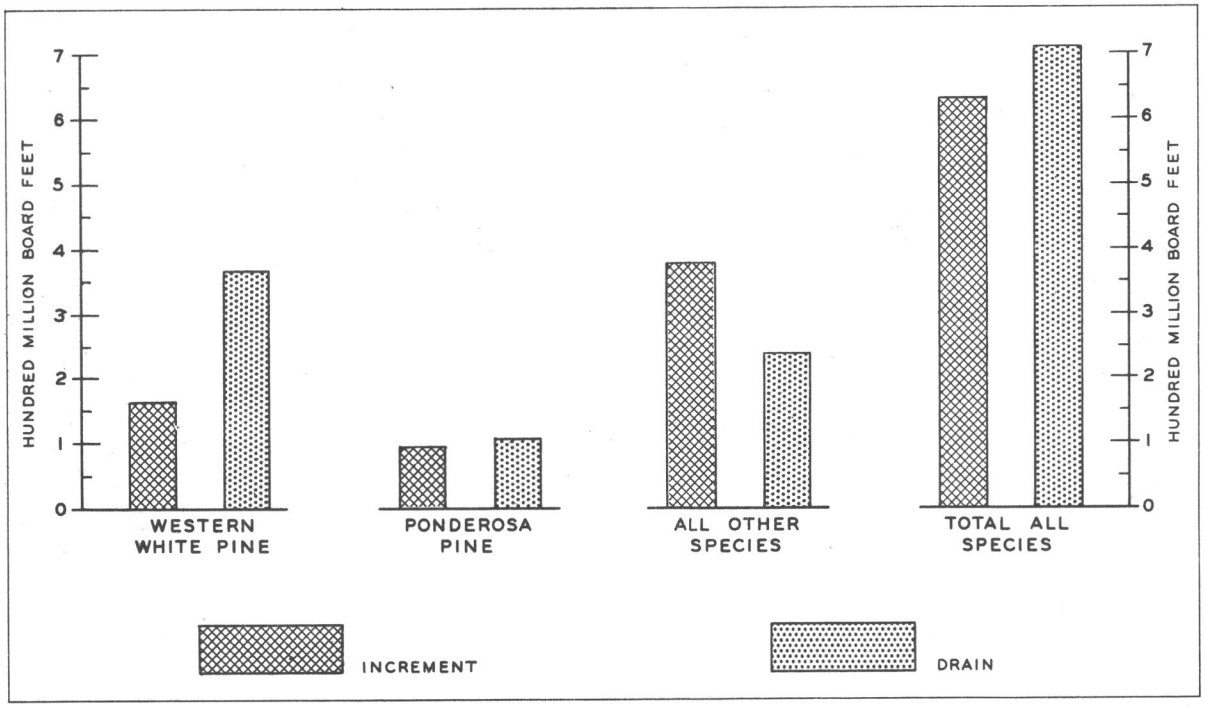


FIGURE 7.- COMPARISON OF AVERAGE ANNUAL BOARD-FOOT DRAIN AND INCREMENT BY PRINCIPAL SPECIES, NORTH IDAHO.

pine - the most heavily used species - total drain is only 72 percent of increment. On lands other than national forest, however, drain exceeds increment by 53 percent. For western white pine and western redcedar the drain is more than three times as great as increment. It is also noteworthy that on national forest lands fire drain was greater than cutting drain during the period covered. For lands other than national forest cutting was by far the larger item in the total drain.

Potential Annual Increment

Heretofore this report has dealt with current annual increment - the net annual volume of tree growth under forest conditions existing at the date of survey. To forecast the maximum possible future contribution of the forest to the local industrial and social welfare, the potential increment was calculated. This is in effect a prediction of the maximum annual cut that can practicably be sustained under assumed future conditions. In making this forecast it was assumed that the potential is equivalent to 75 percent of the mean annual increment as shown by normal yield tables at the rotation ages given in table 9. On this basis the potential is shown in table 8. This was derived by multiplying the increment rates per acre shown in table 9 by the area of forest lands in the several sites as shown in table 2.

On the basis of the above assumptions, the potential annual increment for the forest lands in North Idaho may ultimately reach 1,607 million board feet, $2\frac{1}{2}$ times the current annual increment of 636 million board feet (see figure 8). Of the difference between present and potential increment, amounting to 971 million board feet, 224 million board feet is the possible increment on 903 thousand acres of forest land now in a nonstocked condition.

Table 8. - Potential mean annual increment on unreserved commercial forest lands by ownership class and forest type

Ownership class and forest type	Potential mean annual increment			
	Total		Average per acre	
	Million board feet	Million cubic feet	Board feet	Cubic feet
National forest land				
Western white pine	427.1	124.5	279	81
Ponderosa pine	62.6	19.4	188	58
Larch-Douglas-fir	84.2	27.6	172	56
Hemlock-white fir	15.2	7.0	149	69
Douglas-fir	21.4	10.3	93	45
Engelmann spruce	23.3	7.5	243	78
Lodgepole pine	27.4	9.1	111	37
Western redcedar	8.5	2.5	274	81
Cedar-white fir	37.1	11.0	273	81
Total or average	706.8	218.9	221	69
Land other than national forest				
Western white pine	514.7	130.2	344	87
Ponderosa pine	216.1	66.9	187	58
Larch-Douglas-fir	104.3	34.4	169	56
Hemlock-white fir	7.6	2.5	237	78
Douglas-fir	12.1	6.1	88	44
Engelmann spruce	10.3	3.1	264	79
Lodgepole pine	10.1	3.4	110	37
Western redcedar	5.4	1.5	284	79
Cedar-white fir	20.0	5.7	290	83
Total or average	900.6	253.8	246	69
All ownerships				
Total or average	1,607.4	472.7	235	69

Table 9. - Rates[1] and rotation ages used in calculating potential annual growth

Forest type	Site class	Trees 7, 11.6, or 12.6 inches or more in d.b.h.[2]		Trees 0.6 inch or more in d.b.h.	
		Mean annual increment per acre	Rotation age	Mean annual increment per acre	Rotation age
		Board feet	Years	Cubic feet	Years
Western white pine	I	506		101	
Hemlock-white fir	II	369		89	
Engelmann spruce	III	201	120	75	100
Western redcedar	IV	100		63	
Cedar-white fir	V	47		50	
Ponderosa pine	I	451		119	
	II	344	160	94	40
	III	220		69	
	IV	156		48	
	V	107		36	
Larch-Douglas-fir	I	373		85	
	II	283	160	71	60
	III	179		57	
	IV	66		43	
	V	15		30	
Lodgepole pine	I & II	131		44	
	III & IV	100	120	33	80

1/ Approximately 75 percent of mean annual growth rates of normally stocked stands as indicated in yield studies cited on page 15. No additional allowance is made for breakage or defect.

2/ Trees 7 inches or more in d.b.h. for the lodgepole pine type, 11.6 inches or more for the ponderosa pine type, and 12.6 inches or more for all other types. Estimated in 16-foot logs, Scribner rule, to a 6- to 8-inch top diameter.

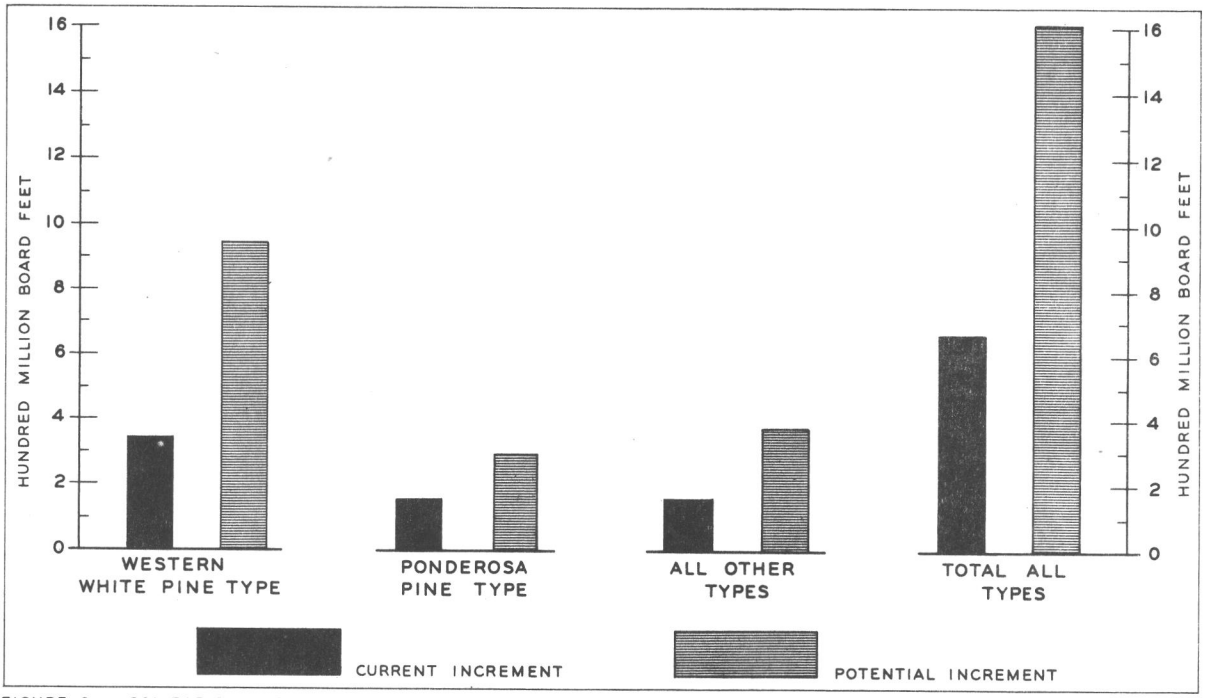


FIGURE 8. — COMPARISON OF POTENTIAL ANNUAL BOARD-FOOT INCREMENT AND CURRENT ANNUAL BOARD-FOOT INCREMENT BY PRINCIPAL TYPES, NORTH IDAHO.

In addition 277 million board feet is the possible increment on 1,096 thousand acres of land bearing mature nongrowing forest. The remainder, 470 million board feet, is due to understocking in present growing stands, and to an abnormally high proportion of the present growing forest area occupied by stands too young to contribute to the board-foot increment.

Measures Designed to Increase Increment

Current annual increment of the growing forest in North Idaho is 636 million board feet. If all the unreserved commercial forest land were producing to its practicable limit, the annual increment could be as much as 1,607 million board feet. The forest drain during the past few years has, on an average, been greater than increment; the drain of white pine, the species upon which the forest industry of North Idaho is largely dependent, has been nearly $2\frac{1}{4}$ times the corresponding increment. Since this unbalance is likely to continue and lead ultimately to curtailment of forest industries

serious unemployment, and impoverishment of local communities, steps should be taken to increase the current increment, and particularly of white pine. This goal cannot be achieved at once; suggested action in the gradual building-up process is outlined below:

1. Since 48 percent of the difference between potential and current board-foot increment is due to the failure of stands now growing to produce at their practicable limit, the most logical approach to this problem is through steps designed to increase the increment of these stands. An abnormally high proportion of them are not now contributing their full share to the board-foot increment, because they support young forests mostly under sawtimber size. In time these stands will reach sawtimber size and this unfavorable situation will be improved. Others are not producing at their practicable limit because they are understocked. The situation with respect to these stands can be improved by better protection from fire, insects, and disease. Except for thinnings or improvement cuttings, no cutting should, in general, be made in any immature stands until they reach the age at which their increment rate slows down perceptably.

2. Nongrowing forest lands, chiefly supporting old-growth timber, are capable of contributing 29 percent of the difference between present and potential increment, or 277 million board feet annually. These stands can be converted to a growing condition through cutting. In some instances this can be accomplished by light selective cuttings and in others by virtual clear cutting followed by natural or artificial regeneration. Although the immediate conversion of these nongrowing forests to growing forests would tend quickly to increase the increment, such action is both impracticable and undesirable because markets could

scarcely be expected to absorb the increased production, and, furthermore, this supply of merchantable timber should be the mainstay of the local forest industries for a number of years to come. The goal of forest management should, therefore, be to cut these nongrowing stands in an orderly manner so that their removal leaves the forest growing stock with a more nearly normal distribution of age classes, and at the same time prolongs the cut of some of the present mills until an adequate volume of young material becomes merchantable.

3. If the nonstocked forest lands were producing at their practicable limit, they could produce 224 million board feet annually, or 23 percent of the additional increment needed to raise the present increment to equal the potential. Some of these lands have recently been clear-cut or burned over, and may restock within the next decade. Others are so denuded that artificial regeneration will be necessary if they are made productive within the next 50 years. On account of high cost, the wisdom of artificial regeneration on the poorer sites may be questioned. Since nonstocked lands practically always result from fire, more effective fire protection is the most direct way to prevent further additions to this class of land.

Timber increment in North Idaho is far below the potentialities of the area. Certain definite measures can and should be taken to increase the forest increment, but no matter how effective the measures taken, the goal cannot be achieved within the next five decades. To the extent that maximum practicable increment is attained, especially of the more valuable local species, to that extent will the resident population be assured of more ample future employment in forest industries, with greater income from the sale of forest products, and with all the indirect benefits from the presence of an important basic raw material.

APPENDIX

RE-NRM
Forest Survey
Growth Phase

Table 11. - Net current annual board foot increment in North Idaho by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Area (Acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
						Species							
Seedling and sapling													
Western white pine	319,182												
Ponderosa pine	146,728	5	249	52	129	10	3			21			469
Larch-Douglas fir	119,511			6	10	2	1						19
Hemlock-white fir	2,705												
Douglas fir	19,564												
Engelmann spruce	1,351												
Lodgepole pine	58,214	1	1	3	7				15	78		7	112
Western red cedar	502												
Cedar-white fir	6,678												
Total	674,435	6	250	61	146	12	4		15	99		7	600
Pole													
Western white pine	256,141	10,042	253	5,709	5,914	5,398	1,681	1,799	726	1,286	53	188	33,049
Ponderosa pine	449,939	689	41,495	5,859	15,487	1,909	131			4,675			70,245
Larch-Douglas fir	259,208	1,094	594	8,693	9,631	1,647	1,276	249	911	2,059		29	26,183
Hemlock-white fir	6,697	27	7	69	131	413	77	135	36	19	2	2	918
Douglas fir	65,182	37	164	215	2,117	299	8	31	22	90		3	2,986
Engelmann spruce	2,210	19		24	36	57	27	12	442	29		10	656
Lodgepole pine	28,900	16	74	144	180	56		1	202	1,501		48	2,222
Western red cedar	861	2		17	9	18	103		15				164
Cedar-white fir	17,243	89	172	215	632	907	354	36	198	2		6	2,611
Total	1,086,381	12,015	42,759	20,945	34,137	10,704	3,657	2,263	2,552	9,661	55	286	139,034
Sawtimber													
Western white pine	389,016	88,542	1,868	12,627	20,881	31,950	10,262	1,522	6,302	473			174,427
Ponderosa pine	300,491	274	25,703	3,102	8,236	1,618	114	64	116	176			39,403
Larch-Douglas fir	167,894	1,276	1,375	12,132	10,224	3,280	563	381	606	382		28	30,247
Hemlock-white fir	10,838	23	50	94	320	2,014	52	64	137	42		21	2,817
Douglas fir	29,269	127	221	103	2,501	467	41	3	68	32		16	3,579
Engelmann spruce	3,452	61		66	43	143	37	19	663	23		5	1,060
Lodgepole pine	2,073	13	10	21	22	5			6	157			234
Western red cedar	2,063	32	2	27	26	49	247	15	14				412
Cedar-white fir	12,520	141	48	151	236	770	618	7	38				2,009
Total	917,616	90,489	29,277	28,323	42,489	40,296	11,934	2,075	7,950	1,285		70	254,188
Total													
Western white pine	964,339	98,584	2,121	18,336	26,795	37,348	11,943	3,321	7,028	1,759	53	188	207,476
Ponderosa pine	897,158	968	67,447	9,013	23,852	3,537	248	64	116	4,872			110,117
Larch-Douglas fir	546,613	2,370	1,969	20,831	19,865	4,929	1,840	630	1,517	2,441		57	56,449
Hemlock-white fir	20,240	50	57	163	451	2,427	129	199	173	61	2	23	3,735
Douglas fir	114,015	164	385	318	4,618	766	49	34	90	122		19	6,565
Engelmann spruce	7,013	80		90	79	200	64	31	1,105	52		15	1,716
Lodgepole pine	89,187	30	85	168	209	61		1	223	1,736		55	2,568
Western red cedar	3,426	34	2	44	35	67	350	15	29				576
Cedar-white fir	36,441	230	220	366	868	1,677	972	43	236	2		6	4,620
Total	2,678,432	102,510	72,286	49,329	76,772	51,012	15,595	4,338	10,517	11,045	55	363	393,822

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RE-NRM
Forest Survey
Growth Phase

Table 12. - Net current annual board foot increment in North Idaho by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Area (acres)	Species: Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	468,606												
Ponderosa pine	31,061	2	91	14	30	6				12			155
Larch-Douglas fir	129,898	1		6	9	1	1			1			19
Hemlock-white fir	4,321												
Douglas fir	24,443				1								1
Engelmann spruce	6,019												
Lodgepole pine	114,344	6	6	19	37				81	432		37	618
Western red cedar	1,256												
Cedar-white fir	23,529	1		2	7	17	7					1	35
Total	803,477	10	97	41	84	24	8		81	445		38	828
Pole													
Western white pine	277,393	9,074	259	5,381	4,931	4,488	1,408	1,816	654	1,047	27	129	29,214
Ponderosa pine	42,941	85	4,042	692	1,709	172	26			467			7,193
Larch-Douglas fir	156,387	478	273	4,207	4,716	857	589	104	458	908		31	12,621
Hemlock-white fir	12,419	15	7	72	161	590	36	38	43	8	1	6	977
Douglas fir	71,846	52	201	262	2,856	343	15	25	77	116		23	3,970
Engelmann spruce	11,364	33		67	51	66	28	13	511	25		7	801
Lodgepole pine	111,568	78	163	362	585	136			907	5,729		344	8,304
Western red cedar	206	1		9	4	9	51		8				82
Cedar-white fir	19,852	44	68	108	336	568	237	9	77	2		10	1,459
Total	703,976	9,860	5,013	11,160	15,349	7,229	2,390	2,005	2,735	8,302	28	550	64,621
Sawtimber													
Western white pine	254,039	50,486	919	9,697	13,577	16,703	6,312	2,323	6,016	1,260		92	107,385
Ponderosa pine	131,896	61	12,607	603	2,977	631	15	11	134	34			17,073
Larch-Douglas fir	126,230	906	953	11,931	8,970	2,341	450	335	1,181	428		110	27,605
Hemlock-white fir	19,067	5	53	83	312	1,986	37	62	161	50		25	2,774
Douglas fir	72,754	460	405	312	6,813	1,128	104	5	244	105		51	9,627
Engelmann spruce	18,077	179		309	237	456	107	122	3,095	103		119	4,727
Lodgepole pine	4,911	35	3	74	64	13		4	14	257			464
Western red cedar	2,477	28		21	25	37	309	43	29				492
Cedar-white fir	38,434	362	323	188	1,122	2,743	1,993	54	157				6,942
Total	667,885	52,522	15,263	23,218	34,097	26,038	9,327	2,959	11,031	2,237		397	177,089
Total													
Western white pine	1,000,038	59,560	1,178	15,078	18,508	21,191	7,720	4,139	6,670	2,307	27	221	136,599
Ponderosa pine	205,898	148	16,740	1,309	4,716	809	41	11	134	513			24,421
Larch-Douglas fir	412,515	1,385	1,226	16,144	13,695	3,199	1,040	439	1,639	1,337		141	40,245
Hemlock-white fir	35,807	20	60	155	473	2,576	73	100	204	58	1	31	3,751
Douglas fir	169,043	512	606	574	9,670	1,471	119	30	321	221		74	13,598
Engelmann spruce	35,460	212		376	288	522	135	135	3,606	128		126	5,528
Lodgepole pine	230,823	119	172	455	686	149		4	1,002	6,418		381	9,386
Western red cedar	3,939	29		30	29	46	360	43	37				574
Cedar-white fir	81,815	407	391	298	1,465	3,328	2,237	63	234	2		11	8,436
Total	2,175,338	62,392	20,373	34,419	49,530	33,291	11,725	4,964	13,847	10,984	28	985	242,538

HJP
4/13/39

RE-NRM
Forest Survey
Growth Phase

Table 13. - Net current annual cubic foot increment in North Idaho by type, species, and general size class.
Available lands other than national forests, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	319,182	3,979	114	2,516	2,198	1,857	696	912	364	464	18	68	13,186
Ponderosa pine	146,728	89	5,036	747	2,059	217	26			517			8,691
Larch-Douglas fir	119,511	309	171	2,450	2,762	501	354	67	253	572		12	7,451
Hemlock-white fir	2,705	2	1	19	25	106	6	5	9	2		1	176
Douglas fir	19,564	11	63	62	740	80	4	5	18	37		5	1,025
Engelmann spruce	1,351	2		6	5	7	2	1	58	2		2	85
Lodgepole pine	58,214	10	31	55	89	58		2	63	655		15	978
Western red cedar	502	3		1	2	3	23	1	1				34
Cedar-white fir	6,678	7	5	17	32	61	39	5	11			1	178
Total	674,435	4,412	5,421	5,873	7,912	2,890	1,150	998	777	2,249	18	104	31,804
Pole													
Western white pine	256,141	9,512	266	5,767	5,262	4,620	1,572	2,016	774	1,108	39	146	31,082
Ponderosa pine	449,939	200	13,116	1,751	4,967	554	39			1,374			22,001
Larch-Douglas fir	259,208	677	399	5,415	6,195	1,322	804	153	532	1,285		36	16,818
Hemlock-white fir	6,697	15	13	69	93	349	35	59	33	13	1	1	681
Douglas fir	65,182	40	203	223	2,578	307	17	26	73	113		21	3,601
Engelmann spruce	2,210	6		8	11	19	10	4	146	10		3	217
Lodgepole pine	28,900	9	34	62	89	45		1	75	690		18	1,023
Western red cedar	861	1		7	3	7	42		6				66
Cedar-white fir	17,243	53	44	123	263	496	276	28	78	3		7	1,371
Total	1,086,381	10,513	14,075	13,425	19,461	7,719	2,795	2,287	1,717	4,596	40	232	76,860
Sawtimber													
Western white pine	389,016	14,425	306	2,067	3,404	5,195	1,676	264	1,030	77			28,444
Ponderosa pine	300,491	35	3,313	402	1,056	206	15	8	15	23			5,073
Larch-Douglas fir	167,894	274	283	2,452	2,148	711	119	72	114	79		5	6,257
Hemlock-white fir	10,838	5	10	19	65	407	10	12	27	8		4	567
Douglas fir	29,269	32	60	25	646	128	11	1	17	8		4	932
Engelmann spruce	3,452	12		13	8	28	7	4	127	4		1	204
Lodgepole pine	2,073	4	3	5	5	2			2	40			61
Western red cedar	2,033	7		6	5	10	56	4	3				91
Cedar-white fir	12,520	35	12	36	57	187	151	1	10				489
Total	917,616	14,829	3,987	5,025	7,394	6,874	2,045	366	1,345	239		14	42,118
Total													
Western white pine	964,339	27,916	686	10,350	10,864	11,672	3,944	3,192	2,168	1,649	57	214	72,712
Ponderosa pine	897,158	324	21,465	2,900	8,082	977	80	8	15	1,914			35,765
Larch-Douglas fir	546,613	1,260	853	10,317	11,105	2,534	1,277	292	899	1,936		53	30,526
Hemlock-white fir	20,240	22	24	107	183	862	51	76	69	23	1	6	1,424
Douglas fir	114,015	83	326	310	3,964	515	32	32	108	158		30	5,558
Engelmann spruce	7,013	20		27	24	54	19	9	331	16		6	506
Lodgepole pine	89,187	23	68	122	183	105		3	140	1,385		33	2,062
Western red cedar	3,426	11		14	10	20	121	5	10				191
Cedar-white fir	36,441	95	61	176	352	744	466	34	99	3		8	2,038
Total	2,678,432	29,754	23,483	24,323	34,767	17,483	5,990	3,651	3,839	7,084	58	350	150,782

HJP
4/15/39

RE-NRM
Forest Survey

Table 14. - Net current annual cubic foot increment in North Idaho by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of cubic feet

Forest type	Area (acres)	Species: Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	468,606	4,054	104	2,402	2,381	2,132	680	799	338	508	22	75	13,495
Ponderosa pine	31,061	15	1,129	140	437	55	4			124			1,904
Larch-Douglas fir	129,898	299	166	2,565	3,005	508	368	68	261	539		16	7,795
Hemlock-white fir	4,321	3	3	16	53	188	8	4	12	1		3	291
Douglas fir	24,443	17	65	79	933	109	7	6	33	37		10	1,296
Engelmann spruce	6,019	4		12	15	17	4	2	157	7		7	225
Lodgepole pine	114,344	26	59	113	183	97			168	1,525		53	2,224
Western red cedar	1,256	4		2	6	7	51		2				72
Cedar-white fir	23,529	11	1	27	99	237	113	1	7			9	505
Total	803,477	4,433	1,527	5,356	7,112	3,350	1,235	880	978	2,741	22	173	27,807
Pole													
Western white pine	277,393	10,227	289	6,334	5,492	4,551	1,652	2,439	928	1,071	41	148	33,172
Ponderosa pine	42,941	23	1,137	193	493	45	8			125			2,024
Larch-Douglas fir	156,387	402	224	3,458	3,774	709	482	86	389	777		26	10,327
Hemlock-white fir	12,419	15	7	67	171	633	31	30	35	5	1	7	1,006
Douglas fir	71,846	48	220	262	2,998	364	22	31	100	126		29	4,200
Engelmann spruce	11,364	39		60	65	101	52	21	766	50		11	1,165
Lodgepole pine	111,568	38	82	181	290	62			456	2,838		172	4,119
Western red cedar	206			2	1	2	10		1				16
Cedar-white fir	19,852	39	21	96	309	675	328	7	40	1		22	1,538
Total	703,976	10,835	1,980	10,653	13,593	7,142	2,585	2,614	2,715	4,993	42	415	57,567
Sawtimber													
Western white pine	254,039	8,568	153	1,657	2,298	2,816	1,068	412	1,030	216		15	18,233
Ponderosa pine	131,896	8	1,552	78	369	77	2	2	16	5			2,109
Larch-Douglas fir	126,230	151	152	1,900	1,425	375	74	56	177	67		16	4,393
Hemlock-white fir	19,067	1	14	22	84	539	10	15	44	14		7	750
Douglas fir	72,754	97	93	67	1,494	252	24	1	56	24		12	2,120
Engelmann spruce	18,077	35		60	48	88	20	22	610	20		26	929
Lodgepole pine	4,911	9	1	20	17	3		1	4	68			123
Western red cedar	2,477	6		4	5	8	67	9	6				105
Cedar-white fir	38,434	80	72	41	249	611	443	10	35				1,541
Total	667,885	8,955	2,037	3,849	5,989	4,769	1,708	528	1,978	414		76	30,303
Total													
Western white pine	1,000,038	22,849	546	10,393	10,171	9,499	3,400	3,650	2,296	1,795	63	238	64,900
Ponderosa pine	205,898	46	3,818	411	1,299	177	14	2	16	254			6,037
Larch-Douglas fir	412,515	852	542	7,923	8,204	1,592	924	210	827	1,383		58	22,515
Hemlock-white fir	35,807	23	24	105	308	1,360	49	49	91	20	1	17	2,047
Douglas fir	169,043	162	378	408	5,425	725	53	38	189	187		51	7,616
Engelmann spruce	35,460	78		132	128	206	76	45	1,533	77		44	2,319
Lodgepole pine	230,823	73	142	314	490	162		1	628	4,431		225	6,466
Western red cedar	3,939	10		8	12	17	128	9	9				193
Cedar-white fir	81,815	130	94	164	657	1,523	884	18	82	1		31	3,584
Total	2,175,338	24,223	5,544	19,858	26,694	15,261	5,528	4,022	5,671	8,148	64	664	115,677

HJP
4/14/39

Table 15. - Net current annual board foot increment in North Idaho by ownership class,[1] species, and county, zones 1 and 2.
Thousands of board feet, log scale, Scribner rule.

Ownership class	Area (acres)	Species: Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Benewah County													
Large private	47,109	1,983	430	1,840	1,561	1,137	337	93	124	226		10	7,741
Small private	101,198	1,785	3,551	2,371	3,328	1,756	399	167	143	951		24	14,475
State	23,039	365	269	463	536	310	78	28	30	108		4	2,191
State reserved	3,704	7	175	50	125	25	9	1	2	28			422
County	24,931	373	454	566	767	353	132	37	35	155		5	2,877
Indian Service	15,345	39	1,215	324	441	132	13	1	6	188			2,359
National forest	30,379	423	166	487	528	371	137	32	49	90		4	2,287
Public domain	12,360	117	50	175	300	115	31	12	10	29		2	841
Total	258,065	5,092	6,310	6,276	7,586	4,199	1,136	371	399	1,775		49	33,193
Bonner County													
Large private	104,535	1,795	1,987	2,127	2,381	405	524	540	344	334	1	3	10,441
Small private	197,690	1,005	3,101	3,514	4,133	451	521	395	433	898	3	8	14,562
State	79,101	1,971	827	1,760	1,687	381	526	680	443	622	3	8	8,878
County	23,691	232	355	560	554	78	105	133	83	124	1	4	2,249
National forest	234,133	2,652	1,419	3,771	3,648	692	920	939	638	716	4	18	15,409
National forest reserved	719	13	1	3	3	2	3	3	2				30
Public domain	10,140	132	210	393	407	47	61	53	56	108	1	1	1,469
Total	650,009	7,820	7,900	12,128	12,783	2,056	2,760	2,743	1,999	2,802	13	34	53,038
Boundary County													
Large private	60,578	639	909	1,606	1,415	285	281	237	729	341	2	7	6,451
Small private	72,962	411	1,389	1,878	1,902	187	229	141	246	475	2	4	6,864
State	25,347	421	117	465	343	112	131	155	360	62	1	6	2,183
County	4,149	35	56	114	95	10	12	14	12	17			365
Indian Service	255	1	24	7	10					2			44
National forest	211,879	1,918	1,850	3,711	2,812	749	770	782	2,119	1,277	6	20	16,014
Public domain	4,914	28	68	165	130	16	12	10	12	15			457
Total	381,084	3,453	4,413	7,946	6,707	1,359	1,435	1,349	3,478	2,190	11	37	32,378
Clearwater County													
Large private	231,315	40,585	1,783	5,592	11,304	16,535	5,008	15	2,427	176	11	23	83,559
Small private	139,806	6,893	4,366	2,272	5,036	3,821	936	12	407	424	10	22	24,201
State	191,560	27,586	2,028	4,383	9,034	12,109	3,660	22	1,639	249	17	36	60,763
County	5,140	147	59	48	101	83	25		9	8			480
Indian Service	5,335	6	321	54	185	36				7			569
National forest	244,449	21,554	659	3,239	6,594	9,239	2,807	17	1,434	201	17	36	45,797
Public domain	17,573	1,006	243	202	446	471	127	1	67	25	1	3	2,592
Other Federal lands	2,648	18	114	22	63	20	3		1	5			240
Total	836,526	97,789	9,573	15,812	32,743	42,414	12,568	67	5,984	1,095	56	120	218,221
Kootenai County													
Large private	41,346	549	896	734	1,805	457	55	149	53	143		2	4,253
Small private	246,750	896	9,782	2,741	5,433	1,132	215	276	144	1,259	2	16	21,897
State	18,578	154	565	266	428	120	26	43	21	77		2	1,712
County	13,456	83	387	140	949	62	11	17	9	60		1	1,019
National forest	147,329	3,873	1,801	2,832	3,938	1,842	304	930	316	428	1	10	15,675
National forest reserved	80												
Public domain	17,924	61	693	232	463	92	16	15	12	112		1	1,697
Total	485,463	5,626	13,524	6,945	11,715	3,715	628	1,430	555	2,079	3	32	46,253
Latah County													
Large private	66,706	1,827	2,442	1,920	2,104	892	141	46	60	223			9,655
Small private	140,675	611	8,438	2,777	4,060	1,251	169	41	48	1,222			18,617
State	29,417	315	456	449	546	211	48	16	14	73			2,138
County	921	2	37	22	25	6	1			1			94
National forest	78,512	803	575	1,456	1,576	851	156	58	78	121			5,676
Public domain	648	2	39	22	30	7	1			6			107
Total	316,874	3,560	11,997	6,646	8,343	3,218	516	161	200	1,645			36,287
Idaho County													
Large private	17,094	24	463	1,019	928	216	25		233	80		29	3,017
Small private	138,719	17	8,842	339	3,080	848	48		237	490		42	13,943
State	28,782	19	1,339	115	928	1,456	106		147	95		25	4,231
County	761		41	5	15	3			1	1			66
Indian Service	2,448		241	6	66	41			2	5			331
National forest	547,121	3,821	18,922	7,044	15,096	8,934	3,215		3,742	5,198		837	60,809
National forest reserved	118,592	63	4,974	794	3,047	570	146		428	357		83	10,462
Public domain	25,679	9	737	133	456	113	11		114	351		34	1,958
Other Federal lands	21,752	28	1,097	133	510	293	82		49	25		9	2,227
Total	895,948	3,981	30,656	9,588	24,126	12,444	3,633		4,953	6,603		1,060	97,044
Lewis County													
Large private	18,983		1,045	113	255	37	12		3	6			1,481
Small private	39,326		2,333	212	699	80	20		3	29			3,376
State	447		34	3	7	1	1						46
County	345		34	3	8	1							46
Indian Service	11,459		365	23	130	12	2		1	8			541
Public domain	2,872		123	9	45	4	1			1			183
Total	73,432		3,934	363	1,154	135	36		7	44			5,673
Nez Perce County													
Large private	6,159		383	92	171	41		9		4			700
Small private	69,831		4,752	719	2,046	397		75	3	86			8,078
State	5,289		299	55	112	27		6		2			501
County	732		60	13	23	6		2					104
Indian Service	2,982		98	10	29	5		1		1			144
Public domain	3,660		214	22	79	13		2		3			333
Total	88,653		5,806	911	2,460	489		95	3	96			9,860
Shoshone County													
Large private	126,243	6,777	340	3,497	3,335	2,575	862	560	1,143	550		17	19,656
Small private	95,756	1,293	1,100	1,278	1,595	770	202	135	209	336		9	6,927
State	31,184	1,768	109	760	932	637	214	138	316	126		3	5,003
County	7,659	140	52	148	123	62	20	15	30	20			610
National forest	681,536	27,348	1,861	11,879	15,336	10,613	3,416	2,206	5,471	2,953		68	80,871
Public domain	41,708	324	513	393	515	206	49	34	46	97		2	2,179
Other Federal lands	725	14	1	25	23	8	3	2	3	2			81
Total	984,811	37,664	3,696	17,980	21,859	14,871	4,766	3,090	7,218	4,084		99	115,327
Total all counties													
Large private	720,068	54,179	10,678	18,540	24,669	22,690	7,245	1,649	5,116	2,083	14	91	146,954
Small private	1,242,713	12,911	47,654	18,101	31,312	10,693	2,842	1,242	1,873	6,170	17	125	132,940
State	433,844	32,609	6,053	8,719	14,523	15,364	4,790	1,098	2,970	1,414	21	85	87,646
State reserved	3,704	7	175	50	125	25	9	1	2	28			422
County	79,785	1,032	1,535	1,619	1,960	664	306	218	179	386	1	10	7,910
Indian Service	38,424	46	2,264	424	841	196	15	2	9	211			4,008
National forest	2,175,338	62,392	20,373	34,419	49,530	33,291	11,725	4,964	13,847	10,984	28	985	248,538
National forest reserved	113,391	76	4,975	797	3,050	572	149	3	430	357		83	10,492
Public domain	136,473	1,679	2,890	1,746	2,871	1,064	309	127	317	748	2	43	11,816
Other Federal lands	25,125	54	1,212	180	596	321	88	2	53	33		9	2,548
Total	4,970,865	154,985	97,809	84,595	129,477	84,900	27,478	9,306	24,796	22,414	83	1,431	647,274

1/ To calculate available increment, subtract "National forest reserved" and "State reserved" from county totals.

WTP

RE-NRM
Forest Survey
Growth Phase

Table 16. - Net current annual cubic foot increment in North Idaho by ownership[1/], species and county, Zones 1 and 2.
Thousands of cubic feet.

Ownership class	Area (acres)	Species: Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Benewah County													
Large private	47,109	710	134	601	573	462	140	54	40	124		8	2,846
Small private	101,198	873	1,317	1,085	1,485	889	203	90	69	412		13	6,436
State	23,039	298	83	270	301	236	60	29	16	71		4	1,368
State reserved	3,704	11	31	34	82	16	9	1	2	9			195
County	24,931	261	193	291	382	209	70	27	17	87		4	1,541
Indian Service	15,345	15	435	120	172	57	7	1	3	73			883
National forest	30,379	749	82	526	546	511	143	74	33	142		12	2,818
Public domain	12,360	178	30	170	236	131	39	19	9	38		3	853
Total	298,065	3,095	2,305	3,097	3,777	2,511	671	295	189	956		44	16,940
Bonner County													
Large private	104,535	760	520	1,260	1,186	167	247	296	211	286	3	7	5,044
Small private	197,690	1,767	1,446	3,353	3,067	389	646	799	568	749	10	25	12,819
State	79,101	1,010	271	1,090	897	166	256	435	248	275	5	11	4,664
County	23,691	173	183	368	348	45	68	82	59	86	1	2	1,415
National forest	234,133	3,063	573	4,288	3,454	584	895	1,391	918	761	16	42	16,005
National forest reserved	719	12	1	9	5	1	3	5	2	1			39
Public domain	10,140	73	49	177	170	23	29	31	29	44		1	626
Total	650,009	6,858	3,143	10,545	9,127	1,375	2,144	3,039	2,036	2,222	35	88	40,612
Boundary County													
Large private	60,578	493	453	888	801	124	160	215	293	183	2	8	3,620
Small private	72,962	437	607	1,143	1,120	132	181	188	188	307	2	5	4,310
State	26,347	300	60	330	257	56	79	137	136	47	2	5	1,409
County	4,149	45	23	68	52	7	15	22	12	9	1	1	255
Indian Service	255		5	2	3								10
National forest	211,879	1,957	610	3,176	2,504	511	640	894	1,475	1,226	10	35	13,038
Public domain	4,914	22	21	80	70	9	10	9	10	16			247
Total	381,084	3,254	1,779	5,687	4,807	839	1,085	1,465	2,114	1,788	17	54	22,889
Clearwater County													
Large private	231,315	7,107	312	1,161	2,484	3,202	934	11	420	122	9	21	15,783
Small private	139,806	1,592	1,086	817	1,987	1,218	279	10	84	215	9	26	7,323
State	191,660	4,931	318	996	2,150	2,490	768	11	288	120	10	23	12,105
County	3,140	33	12	19	42	26	7		2	5			146
Indian Service	5,935	2	53	12	61	14	1			2			145
National forest	244,449	5,360	129	1,172	3,008	3,215	843	34	318	350	32	71	14,532
Public domain	17,573	332	55	122	326	240	55	3	17	36	3	8	1,197
Other Federal lands	2,648	5	23	15	51	14	3			2		1	114
Total	836,526	19,362	1,988	4,314	10,109	10,419	2,890	69	1,129	852	63	150	51,345
Kootenai County													
Large private	41,346	375	375	482	698	308	64	119	46	118		4	2,589
Small private	246,750	1,048	4,034	2,298	3,509	1,111	289	327	192	961	1	22	13,792
State	18,578	151	193	195	258	97	28	45	20	58		2	1,047
County	13,456	74	123	148	187	81	22	23	14	53		2	727
National forest	147,329	2,436	497	2,219	2,843	1,292	321	727	265	428	1	14	11,043
National forest reserved	80	3		2	2	1	1	1					10
Public domain	17,924	93	234	202	269	99	27	28	19	73		2	1,046
Total	485,463	4,180	5,456	5,546	7,766	2,989	752	1,270	556	1,691	2	46	30,254
Latah County													
Large private	66,706	697	532	649	743	439	101	49	27	141			3,378
Small private	140,675	624	2,578	1,278	1,917	703	168	66	40	549			7,923
State	29,417	402	140	372	445	286	79	40	17	112			1,893
County	921	4	5	9	13	4	2			1			38
National forest	78,512	1,223	202	1,045	1,143	916	230	121	59	231			5,170
Public domain	643	1	12	7	10	2	1			2			35
Total	316,874	2,951	3,469	3,360	4,271	2,350	581	276	143	1,036			18,437
Idaho County													
Large private	17,094	4	86	165	180	39	5		68	31		8	586
Small private	138,719	15	2,579	169	1,601	263	31		110	315		35	5,118
State	28,782	8	271	36	343	324	49		41	39		11	1,122
County	761		10	3	10	1			1	3			28
Indian Service	2,448		56	3	32	3			1	3		1	99
National forest	547,121	957	2,516	2,116	5,887	3,552	1,115	4	1,367	2,929	5	416	20,864
National forest reserved	118,592	29	1,122	200	1,576	184	45		257	294		54	3,693
Public domain	26,679	8	176	105	387	90	12		66	196		24	1,064
Other Federal lands	21,752	9	203	38	202	135	52		17	12		6	674
Total	895,948	1,030	7,019	2,835	10,218	4,593	1,309	4	1,928	3,752	5	555	33,248
Lewis County													
Large private	18,983		473	30	174	18	2		1	12			710
Small private	39,326		831	72	479	37	3		4	46			1,472
State	447		8	1	3								12
County	345		7		4								11
Indian Service	11,459		375	10	169	11			1	14			580
Public domain	2,872		47	3	44	2				4			100
Total	73,432		1,741	116	873	68	5		6	76			2,885
Nez Perce County													
Large private	6,159		67	17	37	20		1	1	14			157
Small private	69,831		1,322	183	686	166		12	10	82			2,461
State	5,289		77	10	33	7		1		8			136
County	732		8	2	4	1							15
Indian Service	2,982		106	3	39	3				3			154
Public domain	3,660		67	10	39	4				3			123
Total	88,653		1,647	225	838	201		14	11	110			3,046
Shoshone County													
Large private	126,243	1,989	113	1,250	1,268	1,043	301	186	235	355		18	6,758
Small private	95,756	1,518	366	1,222	1,701	1,083	279	156	87	333		23	6,768
State	31,184	569	37	334	387	295	87	52	52	76		5	1,904
County	7,659	63	12	61	59	38	11	7	7	16		1	275
National forest	681,536	8,478	935	5,316	7,309	4,680	1,341	777	1,236	2,061		74	32,207
Public domain	41,708	678	171	509	606	459	119	69	31	141		10	2,793
Other Federal lands	725	7		9	10	5	1	1	1	1			35
Total	984,811	13,302	1,634	8,701	11,340	7,603	2,139	1,248	1,659	2,983		131	50,740
Total all counties													
Large private	720,068	12,135	3,165	6,503	8,144	5,822	1,954	931	1,343	1,386	14	74	41,471
Small private	1,241,713	7,874	16,166	11,620	17,552	5,991	2,079	1,648	1,362	3,969	22	149	68,422
State	433,844	7,669	1,458	3,634	5,074	3,957	1,406	750	828	806	17	61	28,660
State reserved	3,704	11	31	34	82	16	9	1	2	9			195
County	79,785	653	576	969	1,101	412	195	161	112	260	2	10	4,451
Indian Service	36,424	17	1,030	150	476	88	8	1	5	95		1	1,871
National forest	2,175,338	24,223	5,544	19,858	26,694	15,261	5,528	4,022	5,671	8,148	64	664	115,677
National forest reserved	112,391	44	1,123	211	1,583	188	49	6	259	295		54	3,742
Public domain	138,473	1,385	862	1,365	2,157	1,059	292	159	181	553	3	48	5,084
Other Federal lands	25,125	21	226	62	263	154	56	1	18	15		7	823
Total	4,970,865	54,032	30,181	44,426	63,126	32,948	11,576	7,680	9,771	15,466	122	1,068	270,396

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1/ To calculate available increment, subtract "National forest reserved" and "State reserved" from county totals.

RE-NRM
Forest Survey
Growth Phase

BENEWAH COUNTY

Table 17. - Net current annual board foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Area (acres)	Species										
		Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Alpine fir	Total
Seedling and sapling												
Western white pine	35,914											
Ponderosa pine	21,494		11	1	3	1				2		18
Larch-Douglas fir	7,155											
Hemlock-white fir	339											
Douglas fir												
Lodgepole pine	6,351											
Cedar-white fir	256											
Total	71,509		11	1	3	1				2		18
Pole												
Western white pine	39,985	2,671	89	1,603	1,514	1,736	445	267	89	445	45	8,904
Ponderosa pine	44,772	85	5073	676	1,353	423				846		8,456
Larch-Douglas fir	23,365	109	72	1,088	1,813	181	181	36	36	109		3,625
Hemlock-white fir	2,076	1		19	7	59	3	1	7	2		99
Douglas fir	2,488	8	15	30	274	37				11		375
Lodgepole pine	1,074	2	3	5	10	10			1	70		101
Western red cedar	746	2		16	8	16	93		15			150
Cedar-white fir	4,876	48	159	127	478	589	64		127			1,592
Total	119,382	2,926	5,411	3,564	5,457	3,051	786	304	275	1,483	45	23,302
Sawtimber												
Western white pine	13,813	1,569	102	716	443	375	102	34	34	34		3,409
Ponderosa pine	2,609	9	282	55	82	18			5	5		456
Larch-Douglas fir	15,154	150	150	1,379	779	330	90		30	90		2,998
Douglas fir	680	2	11	2	157	9						181
Lodgepole pine	438			4		3			3	43		53
Western red cedar	276	5	2	16	10	9	9		1			52
Cedar-white fir	121	1		2	2	7	3					15
Total	33,091	1,736	547	2,174	1,473	751	204	34	73	172		7,164
Total												
Western white pine	89,712	4,240	191	2,319	1,957	2,111	547	301	123	479	45	12,313
Ponderosa pine	68,875	94	5,366	732	1,438	442			5	853		8,930
Larch-Douglas fir	45,674	259	222	2,467	2,592	511	271	36	66	199		6,623
Hemlock-white fir	2,415	1		19	7	59	3	1	7	2		99
Douglas fir	3,168	10	26	32	431	46				11		556
Lodgepole pine	7,863	2	3	9	10	13			4	113		154
Western red cedar	1,022	7	2	32	18	25	102		16			202
Cedar-white fir	5,253	49	159	129	480	596	67		127			1,607
Total	223,982	4,662	5,969	5,739	6,933	3,803	990	338	348	1,657	45	30,484

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RE-NRM
Forest Survey
Growth Phase

BENEWAH COUNTY

Table 18. - Net current annual board foot increment by type, species, and general size class.
National forest available. Zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species											
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Alpine fir	Total
Seedling and sapling												
Western white pine	6,851											
Ponderosa pine	234											
Larch-Douglas fir	1,345	1		4	7	1	1			1		15
Hemlock-white fir												
Douglas fir												
Lodgepole pine	1,080											
Cedar-white fir												
Total	9,510	1		4	7	1	1			1		15
Pole												
Western white pine	14,570	258	9	155	146	168	43	26	9	43	4	861
Ponderosa pine	1,380	2	100	13	27	8				17		167
Larch-Douglas fir	1,541	8	6	84	140	14	14	3	3	8		280
Hemlock-white fir												
Douglas fir	8				1							1
Lodgepole pine	128			1	1	1				9		12
Western red cedar	206	1		9	4	9	51		8			82
Cedar-white fir	772	9	28	23	86	106	11		23			286
Total	18,605	278	143	285	405	306	119	29	43	77	4	1,689
Sawtimber												
Western white pine	1,266	129	8	59	37	31	8	3	3	3		281
Ponderosa pine												
Larch-Douglas fir	998	15	15	139	79	33	9		3	9		302
Douglas fir												
Lodgepole pine												
Western red cedar												
Cedar-white fir												
Total	2,264	144	23	198	116	64	17	3	6	12		583
Total												
Western white pine	22,687	387	17	214	183	199	51	29	12	46	4	1,142
Ponderosa pine	1,614	2	100	13	27	8				17		167
Larch-Douglas fir	3,884	24	21	227	226	48	24	3	6	18		597
Hemlock-white fir												
Douglas fir	8				1							1
Lodgepole pine	1,208			1	1	1				9		12
Western red cedar	206	1		9	4	9	51		8			82
Cedar-white fir	772	9	28	23	86	106	11		23			286
Total	30,379	423	166	487	528	371	137	32	49	90	4	2,287

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RE-NRM
Forest Survey
Growth Phase

BENEWAH COUNTY

Table 19. - Net current annual cubic foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of cubic feet

Forest type	Species											
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Alpine fir	Total
Seedling and sapling												
Western white pine	35,914	454.8	15.2	272.9	257.7	295.6	75.8	45.5	15.2	75.8	7.6	1,516.1
Ponderosa pine	21,494	12.6	758.8	101.2	202.4	63.2				126.5		1,264.7
Larch-Douglas fir	7,155	11.8	7.9	117.8	196.4	19.6	19.6	3.9	3.9	11.8		392.7
Hemlock-white fir	339	.3		5.0	1.9	15.9	.8	.3	1.9	.5		26.6
Douglas fir												
Lodgepole pine	6,351	.7	1.1	1.8	3.6	3.6			.3	24.7		35.8
Cedar-white fir	256	.3	1.1	.9	3.2	4.0	.4		.9			10.8
Total	71,509	480.5	784.1	499.6	665.2	401.9	96.6	49.7	22.2	239.3	7.6	3,246.7
Pole												
Western white pine	39,985	1,466.0	48.9	879.6	830.8	952.9	244.3	146.6	48.9	244.3	24.4	4,886.7
Ponderosa pine	44,772	19.9	1,192.3	159.0	317.9	99.3				198.7		1,987.1
Larch-Douglas fir	23,365	48.1	32.1	481.3	802.1	80.2	80.2	16.0	16.0	48.1		1,604.1
Hemlock-white fir	2,076	2.3		43.3	15.9	136.7	6.8	2.3	15.9	4.6		227.8
Douglas fir	2,488	2.8	5.7	11.3	103.5	14.2				4.3		141.8
Lodgepole pine	1,074	.8	1.3	2.1	4.1	4.1			.4	28.6		41.4
Western red cedar	746	.6		6.2	2.9	6.2	35.2		5.7			56.8
Cedar-white fir	4,876	11.7	38.9	31.1	116.6	143.8	15.5		31.1			388.7
Total	119,382	1,552.2	1,319.2	1,613.9	2,193.8	1,437.4	382.0	164.9	118.0	528.6	24.4	9,334.4
Sawtimber												
Western white pine	13,813	267.3	17.4	122.1	75.6	63.9	17.4	5.8	5.8	5.8		581.1
Ponderosa pine	2,609	1.2	38.0	7.4	11.0	2.4			.6	.6		61.2
Larch-Douglas fir	15,154	31.3	31.3	288.3	162.9	68.9	18.8		6.3	18.8		626.6
Douglas fir	680	.4	2.6	.4	37.5	2.2						43.1
Lodgepole pine	438			1.0		.7			.9	11.6		14.2
Western red cedar	276	.9	.3	3.0	1.9	1.7	1.9	.1	.2	.1		10.1
Cedar-white fir	121	.5		.9	1.3	4.8	1.8		.4	.1		9.8
Total	33,091	301.6	89.6	423.1	290.2	144.6	39.9	5.9	14.2	37.0		1,346.1
Total												
Western white pine	89,712	2,188.1	81.5	1,274.6	1,164.1	1,312.4	337.5	197.9	69.9	325.9	32.0	6,983.9
Ponderosa pine	68,875	33.7	1,989.1	267.6	531.3	164.9			.6	325.8		3,313.0
Larch-Douglas fir	45,674	91.2	71.3	887.4	1,161.4	168.7	118.6	19.9	26.2	78.7		2,623.4
Hemlock-white fir	2,415	2.6		48.3	17.8	152.6	7.6	2.6	17.8	5.1		254.4
Douglas fir	3,168	3.2	8.3	11.7	141.0	16.4				4.3		184.9
Lodgepole pine	7,863	1.5	2.4	4.9	7.7	8.4			1.6	64.9		91.4
Western red cedar	1,022	1.5	.3	9.2	4.8	7.9	37.1	.1	5.9	.1		66.9
Cedar-white fir	5,253	12.5	40.0	32.9	121.1	152.6	17.7		32.4	.1		409.3
Total	223,982	2,334.3	2,192.9	2,536.6	3,149.2	1,983.9	518.5	220.5	154.4	804.9	32.0	13,927.2

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RE-NRM
Forest Survey
Growth Phase

BENEWAH COUNTY

Table 20. - Net current annual cubic foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species											
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Alpine fir	Total
Seedling and sapling												
Western white pine	6,851	148.0	4.9	88.8	83.9	96.2	24.7	14.8	4.9	24.7	2.5	493.4
Ponderosa pine	234	.2	9.6	1.3	2.6	.8				1.6		16.1
Larch-Douglas fir	1,345	2.2	1.5	22.2	37.0	3.7	3.7	.8	.8	2.2		74.1
Hemlock-white fir												
Douglas fir												
Lodgepole pine	1,080	.1	.2	.3	.5	.5				3.5		5.1
Cedar-white fir												
Total	9,510	150.3	16.2	112.6	124.0	101.2	28.4	15.6	5.7	32.0	2.5	588.7
Pole												
Western white pine	14,570	564.3	18.8	338.5	319.7	366.8	94.0	56.4	18.8	94.0	9.4	1,880.7
Ponderosa pine	1,380	.6	35.5	4.7	9.5	3.0				5.9		59.2
Larch-Douglas fir	1,541	3.3	2.2	33.0	55.1	5.5	5.5	1.1	1.1	3.3		110.1
Hemlock-white fir												
Douglas fir	8				.3	.1						.4
Lodgepole pine	128	.1	.2	.3	.7	.7			.1	4.7		6.8
Western red cedar	206	.2		1.8	.8	1.8	10.1		1.6			16.3
Cedar-white fir	772	1.7	5.7	4.6	17.2	21.1	2.3		4.6			57.2
Total	18,605	570.2	62.4	382.9	403.3	399.0	111.9	57.5	26.2	107.9	9.4	2,130.7
Sawtimber												
Western white pine	1,266	26.1	1.7	11.9	7.3	6.2	1.7	.6	.6	.6		56.7
Ponderosa pine												
Larch-Douglas fir	998	2.1	2.1	19.2	10.9	4.6	1.2		.4	1.2		41.7
Douglas fir												
Lodgepole pine												
Western red cedar												
Cedar-white fir												
Total	2,264	28.2	3.8	31.1	18.2	10.8	2.9	.6	1.0	1.8		98.4
Total												
Western white pine	22,687	738.4	25.4	439.2	410.9	469.2	120.4	71.8	24.3	119.3	11.9	2,430.8
Ponderosa pine	1,614	.8	45.1	6.0	12.1	3.8				7.5		75.3
Larch-Douglas fir	3,884	7.6	5.8	74.4	103.0	13.8	10.4	1.9	2.3	6.7		225.9
Hemlock-white fir												
Douglas fir	8				.3	.1						.4
Lodgepole pine	1,208	.2	.4	.6	1.2	1.2			.1	8.2		11.9
Western red cedar	206	.2		1.8	.8	1.8	10.1		1.6			16.3
Cedar-white fir	772	1.7	5.7	4.6	17.2	21.1	2.3		4.6			57.2
Total	30,379	748.9	82.4	526.6	545.5	511.0	143.2	73.7	32.9	141.7	11.9	2,817.8

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RE-NRM
Forest Survey
Growth Phase

BONNER COUNTY

Table 21.- Net current annual board foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	67,376												
Ponderosa pine	28,597	2	58	19	38	1	1			6			125
Larch-Douglas fir	42,084												
Hemlock-white fir	387												
Douglas fir	778												
Lodgepole pine	13,439												
Western red cedar	181												
Cedar-white fir	164												
Total	153,006	2	58	19	38	1	1			6			125
Pole													
Western white pine	46,345	1,403	47	1,169	608	117	280	692	280	47	9	23	4,675
Ponderosa pine	68,434	194	4,471	1,458	2,916	97	97			486			9,719
Larch-Douglas fir	71,204	451	180	3,244	2,884	360	451	90	451	901			9,012
Hemlock-white fir	426	2		4	8	44	47	68	16	12		1	202
Douglas fir	4,900		20	24	257	61	4	8	8	20			402
Engelmann spruce													
Lodgepole pine	7,293		40	71	71	16			79	514			791
Cedar-white fir	2,534	18		35	25	35	156	32	53				354
Total	201,136	2,068	4,758	6,005	6,769	730	1,035	890	887	1,980	9	24	25,155
Sawtimber													
Western white pine	19,370	2,726	124	558	558	372	619	743	434	62			6,196
Ponderosa pine	23,736	75	1,391	248	646	75	25	25					2,485
Larch-Douglas fir	17,162	274	137	1,505	1,026	171	137	103	34	34			3,421
Hemlock-white fir	189	4		8	4	9	17	38	4				84
Douglas fir	453	4	12	11	90	4							121
Lodgepole pine	60	1			1					4			6
Western red cedar	45	1					3	2					6
Cedar-white fir													
Total	61,015	3,085	1,664	2,330	2,325	631	801	911	472	100			12,319
Total													
Western white pine	133,091	4,129	171	1,727	1,166	489	899	1,435	714	109	9	23	10,871
Ponderosa pine	120,767	271	5,920	1,725	3,600	173	123	25		492			12,329
Larch-Douglas fir	130,450	725	317	4,749	3,910	531	588	193	485	935			12,433
Hemlock-white fir	1,002	6		12	12	53	64	106	20	12		1	286
Douglas fir	6,131	4	32	35	347	65	4	8	8	20			523
Engelmann spruce													
Lodgepole pine	20,792	1	40	71	72	16			79	518			797
Western red cedar	226	1					3	2					6
Cedar-white fir	2,698	18		35	25	35	156	32	53				354
Total	415,157	5,155	6,480	8,354	9,132	1,362	1,837	1,801	1,359	2,086	9	24	37,599

HJP 3/11/39

RE-NRM
Forest Survey
Growth Phase

BONNER COUNTY

Table 22. - Net current annual board foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Area (acres)	Species											
		Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	52,883												
Ponderosa pine	2,448												
Larch-Douglas fir	27,652												
Hemlock-white fir	98												
Douglas fir	684												
Engelmann spruce	178												
Lodgepole pine	2,964												
Western red cedar	3												
Cedar-white fir	282												
Total	87,192												
Pole													
Western white pine	46,333	597	20	498	259	50	119	295	119	20	4	10	1,991
Ponderosa pine	8,932	21	474	155	309	10	10			52			1,031
Larch-Douglas fir	44,314	179	72	1,289	1,145	143	179	36	179	358			3,580
Hemlock-white fir	134	1		1	2	11	12	17	4	3			51
Douglas fir	7,853		16	20	211	49	3	7	7	16			329
Engelmann spruce	1,084												
Lodgepole pine	3,511		15	28	28	6			31	201			309
Cedar-white fir	733	4		9	6	9	38	8	13				87
Total	112,894	802	597	2,000	1,960	278	361	363	353	650	4	10	7,378
Sawtimber													
Western white pine	8,690	1,558	71	319	319	212	354	425	248	35			3,541
Ponderosa pine	8,536	32	606	108	282	33	11	11					1,083
Larch-Douglas fir	15,203	236	118	1,301	887	148	118	89	30	30			2,957
Hemlock-white fir													
Douglas fir	1,110	8	25	23	189	8							253
Lodgepole pine	7									1			1
Western red cedar	116	1					6	3	1				11
Cedar-white fir	385	15	2	20	11	13	70	48	6				185
Total	34,047	1,850	822	1,771	1,688	414	559	576	285	66			8,031
Total													
Western white pine	107,906	2,155	91	817	578	262	473	720	367	55	4	10	5,532
Ponderosa pine	19,916	53	1,080	263	591	43	21	11		52			2,114
Larch-Douglas fir	87,169	415	190	2,590	2,032	291	297	125	209	388			6,537
Hemlock-white fir	232	1		1	2	11	12	17	4	3			51
Douglas fir	9,647	8	41	43	400	57	3	7	7	16			582
Engelmann spruce	1,262												
Lodgepole pine	6,482		15	28	28	6			31	202			310
Western red cedar	119	1					6	3	1				11
Cedar-white fir	1,400	19	2	29	17	22	108	56	19				272
Total	234,133	2,652	1,419	3,771	3,648	692	920	939	638	716	4	10	15,409

HJP 3/13/39

RE-NRM
Forest Survey
Growth Phase

BONNER COUNTY

Table 23. - Net current annual cubic foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of cubic feet

Forest type	Area (acres)	Species											
		Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	67,376	1,130.7	37.7	942.3	490.0	94.2	226.1	557.8	226.1	37.7	7.5	18.9	3,769.0
Ponderosa pine	28,597	31.1	716.1	233.5	467.0	15.6	15.6			77.8			1,556.7
Larch-Douglas fir	42,084	143.0	57.2	1,029.8	915.3	114.4	143.0	28.6	143.0	286.1			2,860.4
Hemlock-white fir	387			.1	.2	1.0	1.1	1.6	.4	.3			4.7
Douglas fir	778		2.1	2.6	27.6	6.5	.4	.9	.9	2.1			43.1
Engelmann spruce													
Lodgepole pine	13,439		11.4	20.4	20.4	4.5			22.7	147.5			226.9
Western red cedar	181	.7				1.0	4.0	.9	.1				6.7
Cedar-white fir	164	.5		1.0	.7	1.0	4.5	.9	1.6				10.2
Total	153,006	1,306.0	824.5	2,229.7	1,921.2	238.2	394.7	590.7	394.8	551.5	7.5	18.9	8,477.7
Pole													
Western white pine	46,345	1,624.5	54.1	1,353.8	704.0	135.4	324.9	801.4	324.9	54.1	10.8	27.1	5,415.0
Ponderosa pine	68,434	58.1	1,334.9	435.3	870.6	29.0	29.0			145.1			2,902.0
Larch-Douglas fir	71,204	243.7	97.5	1,754.8	1,559.8	195.0	243.7	48.7	243.7	487.5			4,874.4
Hemlock-white fir	426	.5		1.1	2.1	11.7	12.2	17.8	4.3	3.2		.3	53.2
Douglas fir	4,900		14.6	17.5	186.6	43.7	2.9	5.8	5.8	14.6			291.5
Engelmann spruce													
Lodgepole pine	7,293		12.9	23.2	23.2	5.1			25.8	167.5			257.7
Cedar-white fir	2,534	11.0		22.1	15.5	22.1	97.3	19.9	33.2				221.1
Total	201,136	1,937.8	1,514.0	3,607.8	3,361.8	442.0	710.0	893.6	637.7	872.0	10.8	27.4	14,014.9
Sawtimber													
Western white pine	19,370	477.2	21.7	97.6	97.6	65.1	108.5	130.2	75.9	10.8			1,084.6
Ponderosa pine	23,736	9.8	181.9	32.5	84.5	9.8	3.2	3.2					324.9
Larch-Douglas fir	17,162	50.3	25.1	276.5	188.5	31.4	25.1	18.9	6.3	6.3			628.4
Hemlock-white fir	189	.7		1.2	.7	1.5	2.7	6.0	.7				13.5
Douglas fir	453	.6	1.9	1.7	14.1	.6							18.9
Lodgepole pine	60	.2			.3	.1				1.1			1.7
Western red cedar	45	.2		.1		.1	2.1	.9	.2				3.6
Cedar-white fir													
Total	61,015	539.0	230.6	409.6	385.7	108.6	141.6	159.2	83.1	18.2			2,075.6
Total													
Western white pine	133,091	3,232.4	113.5	2,393.7	1,291.6	294.7	659.5	1,489.4	626.9	102.6	18.3	46.0	10,268.6
Ponderosa pine	120,767	99.0	2,232.9	701.3	1,422.1	54.4	47.8	3.2		222.9			4,783.6
Larch-Douglas fir	130,450	437.0	179.8	3,061.1	2,663.6	340.8	411.8	96.2	393.0	779.9			8,363.2
Hemlock-white fir	1,002	1.2		2.4	3.0	14.2	16.0	25.4	5.4	3.5		.3	71.4
Douglas fir	6,131	.6	18.6	21.8	228.3	50.8	3.3	6.7	6.7	16.7			353.5
Engelmann spruce													
Lodgepole pine	20,792	.2	24.3	43.6	43.9	9.7			48.5	316.1			486.3
Western red cedar	226	.9		.1		1.1	6.1	1.8	.3				10.3
Cedar-white fir	2,698	11.5		23.1	16.2	23.1	101.8	20.8	34.8				231.3
Total	415,157	3,782.8	2,569.1	6,247.1	5,668.7	788.8	1,246.3	1,643.5	1,115.6	1,441.7	18.3	46.3	24,568.2

HJP 3/10/39.

RE-NRM
Forest Survey
Growth Phase

BONNER COUNTY

Table 24. - Net current annual cubic foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	52,883	748.6	24.9	623.8	324.4	62.4	149.7	369.3	149.7	24.9	5.0	12.5	2,495.2
Ponderosa pine	2,448	2.7	62.2	20.3	40.6	1.4	1.4			6.8			135.4
Larch-Douglas fir	27,652	92.9	37.2	668.7	594.4	74.3	92.9	18.6	92.9	185.7			1,857.6
Hemlock-white fir	98					.2	.2	.3	.1	.1			.9
Douglas fir	684		2.0	2.4	25.3	5.9	.4	.8	.8	2.0			39.6
Engelmann spruce	178				.1	.2	.1		1.1	.1			1.6
Lodgepole pine	2,964		2.8	5.0	5.0	1.1			5.6	36.3			55.8
Western red cedar	3					.1	.2	.1					.4
Cedar white fir	282	.5		1.0	.7	1.0	4.6	.9	1.6				10.3
Total	87,192	844.7	129.1	1,321.2	990.5	146.6	249.5	390.0	251.8	255.9	5.0	12.5	4,596.8
Pole													
Western white pine	46,333	1,705.5	56.9	1,421.3	739.0	142.1	341.1	841.4	341.1	56.9	11.4	28.4	5,685.1
Ponderosa pine	8,932	7.7	177.4	57.8	115.7	3.9	3.9			19.3			385.7
Larch-Douglas fir	44,314	157.6	63.1	1,134.9	1,008.8	126.1	157.6	31.5	157.6	315.3			3,152.5
Hemlock-white fir	134	.2		.3	.6	3.5	3.7	5.3	1.3	1.0		.1	16.0
Douglas fir	7,853		23.1	27.7	295.5	69.2	4.6	9.2	9.2	23.1			461.6
Engelmann spruce	1,084	3.6		3.6	6.1	10.9	6.1	2.4	81.4	6.1		1.2	121.4
Lodgepole pine	3,511		7.0	12.7	12.7	2.8			14.1	91.6			140.9
Cedar-white fir	733	2.9		5.9	4.1	5.9	25.9	5.3	8.8				58.8
Total	112,894	1,877.5	327.5	2,664.2	2,182.5	364.4	542.9	895.1	613.5	513.3	11.4	29.7	10,022.0
Sawtimber													
Western white pine	8,690	292.6	13.3	59.9	59.9	39.9	66.5	79.8	46.5	6.7			665.1
Ponderosa pine	8,536	4.2	78.7	14.1	36.6	4.2	1.4	1.4					140.6
Larch-Douglas fir	15,203	40.2	20.1	220.8	150.6	25.1	20.1	15.0	5.0	5.0			501.9
Hemlock-white fir													
Douglas fir	1,110	1.3	4.2	3.8	31.8	1.3							42.4
Lodgepole pine	7									.2			.2
Western red cedar	116	.2		.1		.1	1.5	.7	.1				2.7
Cedar-white fir	385	2.7	.3	3.6	2.0	2.3	12.6	8.6	1.0				33.1
Total	34,047	341.2	116.6	302.3	280.9	72.9	102.1	105.5	52.6	11.9			1,386.0
Total													
Western white pine	107,906	2,746.7	95.1	2,105.0	1,123.3	244.4	557.3	1,290.5	537.3	88.5	16.4	40.9	8,845.4
Ponderosa pine	19,916	14.6	318.3	92.2	192.9	9.5	6.7	1.4		26.1			661.7
Larch-Douglas fir	87,169	290.7	120.4	2,024.4	1,753.8	225.5	270.6	65.1	255.5	506.0			5,512.0
Hemlock-white fir	232	.2		.3	.6	3.7	3.9	5.6	1.4	1.1		.1	16.9
Douglas fir	9,647	1.3	29.3	33.9	352.6	76.4	5.0	10.0	10.0	25.1			543.6
Engelmann spruce	1,262	3.6		3.6	6.2	11.1	6.2	2.4	82.5	6.2		1.2	123.0
Lodgepole pine	6,482		9.8	17.7	17.7	3.9			19.7	128.1			196.9
Western red cedar	119	.2		.1		.2	1.7	.8	.1				3.1
Cedar-white fir	1,400	6.1	.3	10.5	6.8	9.2	43.1	14.8	11.4				102.2
Total	234,133	3,063.4	573.2	4,287.7	3,453.9	583.9	894.5	1,390.6	917.9	781.1	16.4	42.2	16,004.8

HJP 3/13/39.

RE-NRM
Forest Survey
Growth Phase

BOUNDARY COUNTY

Table 25. - Net current annual board foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Area (acres)	Species: Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	21,160												
Ponderosa pine	17,327	3	75	25	49	2	2			8			164
Larch-Douglas fir	16,378												
Hemlock-white fir													
Douglas fir	830												
Engelmann spruce	632												
Lodgepole pine	2,659												
Cedar-white fir	408												
Total	59,394	3	75	25	49	2	2			8			164
Pole													
Western white pine	21,176	715	24	596	310	59	143	352	143	24	5	12	2,383
Ponderosa pine	19,078	69	1,587	517	1,035	34	34			173			3,449
Larch-Douglas fir	35,371	253	101	1,820	1,618	202	253	50	253	506			5,056
Hemlock-white fir	167												
Douglas fir	3,256		7	8	85	20	1	3	3	7			134
Engelmann spruce	2,032	16		16	26	47	26	11	353	26		5	526
Lodgepole pine	2,267		8	14	14	3			15	98			152
Total	83,347	1,053	1,727	2,971	3,088	365	457	416	767	834	5	17	11,700
Sawtimber													
Western white pine	5,593	361	10	107	78	69	107	107	127	10			976
Ponderosa pine	9,035	10	628	165	195	10				21			1,029
Larch-Douglas fir	9,377	70	123	930	474	53	35	18	35	18			1,756
Hemlock-white fir	38					1			1				2
Douglas fir	32			1	3								4
Engelmann spruce	2,075	34		34	7	108	34	13	424	20			674
Lodgepole pine	33								1	2			3
Western red cedar	281	4		2	1	2	30	13	4				56
Cedar-white fir													
Total	26,464	479	761	1,239	758	243	206	151	592	71			4,500
Total													
Western white pine	47,929	1,076	34	703	388	128	250	459	270	34	5	12	3,359
Ponderosa pine	45,440	82	2,290	707	1,279	46	36			202			4,642
Larch-Douglas fir	61,126	323	224	2,750	2,092	255	288	68	288	524			6,812
Hemlock-white fir	205					1			1				2
Douglas fir	4,118		7	9	88	20	1	3	3	7			138
Engelmann spruce	4,739	50		50	33	155	60	24	777	46		5	1,200
Lodgepole pine	4,959		8	14	14	3			16	100			155
Western red cedar	281	4		2	1	2	30	13	4				56
Cedar-white fir	408												
Total	169,205	1,535	2,563	4,235	3,895	610	665	567	1,359	913	5	17	16,364

HJP 3/14/39

RE-NRM
Forest Survey
Growth Phase

BOUNDARY COUNTY

Table 26. - Net current annual board foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	23,546												
Ponderosa pine	3,825	1	14	5	9					1			30
Larch-Douglas fir	27,197												
Hemlock-white fir	76												
Douglas fir	1,023												
Engelmann spruce	1,567												
Lodgepole pine	15,856												
Cedar-white fir													
Total	73,090	1	14	5	9					1			30
Pole													
Western white pine	34,410	956	32	796	414	80	191	472	191	32	6	16	3,186
Ponderosa pine	6,529	31	714	233	465	18	16			77			1,552
Larch-Douglas fir	30,660	116	46	835	743	93	116	23	116	232			2,320
Hemlock-white fir													
Douglas fir	2,453		2	2	22	5		1	1	2			35
Engelmann spruce	8,324	13		13	21	39	21	9	287	21		4	428
Lodgepole pine	16,554		60	108	108	24			120	782			1,202
Total	98,930	1,116	854	1,987	1,773	257	344	505	715	1,146	6	20	8,723
Sawtimber													
Western white pine	8,115	590	16	175	128	112	175	175	207	16			1,594
Ponderosa pine	12,370	13	803	211	250	13				27			1,317
Larch-Douglas fir	12,424	93	163	1,232	627	70	46	23	46	23			2,323
Hemlock-white fir													
Douglas fir													
Engelmann spruce	5,790	89		89	18	284	89	36	1,120	53			1,778
Lodgepole pine	171	1		1	1	3			5	11			22
Western red cedar	825	12		5	3	5	89	39	12				165
Cedar-white fir	164	3		6	3	5	27	4	14				62
Total	39,859	801	982	1,719	1,030	492	426	277	1,404	130			7,261
Total													
Western white pine	66,071	1,546	48	971	542	192	366	647	398	48	6	16	4,780
Ponderosa pine	22,724	45	1,531	449	724	29	16			105			2,899
Larch-Douglas fir	70,281	209	209	2,067	1,370	163	162	46	162	255			4,643
Hemlock-white fir	76												
Douglas fir	3,476		2	2	22	5		1	1	2			35
Engelmann spruce	15,681	102		102	39	323	110	45	1,407	74		4	2,206
Lodgepole pine	32,581	1	60	109	109	27			125	793			1,224
Western red cedar	825	12		5	3	5	89	39	12				165
Cedar-white fir	164	3		6	3	5	27	4	14				62
Total	211,879	1,918	1,850	3,711	2,812	749	770	782	2,119	1,277	6	20	16,014

HJP 3/14/39

RE-NRM
Forest Survey
Growth Phase

BOUNDARY COUNTY

Table 27. - Net current annual cubic foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of cubic feet

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	21,160	215.1	7.2	179.3	93.2	17.9	43.0	106.1	43.0	7.2	1.4	3.6	717.0
Ponderosa pine	17,327	21.3	490.3	159.9	319.8	10.7	10.7			53.3			1,066.0
Larch-Douglas fir	16,378	54.9	21.9	395.1	351.3	43.9	54.9	11.0	54.9	109.8			1,097.7
Hemlock-white fir													
Douglas fir	830		1.6	1.9	20.4	4.8	.3	.6	.6	1.6			31.8
Engelmann spruce	632	.7		.7	1.2	2.2	1.2	.5	16.3	1.2		.3	24.3
Lodgepole pine	2,659		2.3	4.2	4.2	.9			4.7	30.3			46.6
Cedar-white fir	408	1.4		2.7	1.9	2.7	12.0	2.5	4.1				27.3
Total	59,394	293.4	523.3	743.8	792.0	83.1	122.1	120.7	123.6	203.4	1.4	3.9	3,010.7
Pole													
Western white pine	21,176	782.3	26.1	651.9	339.0	65.2	156.4	385.9	156.4	26.1	5.2	13.0	2,607.5
Ponderosa pine	19,078	19.3	443.8	144.7	289.4	9.7	9.7			48.2			964.8
Larch-Douglas fir	35,371	100.5	40.2	723.9	643.5	80.5	100.5	20.1	100.5	201.1			2,010.8
Hemlock-white fir	167	.2		.3	.6	3.4	3.6	5.3	1.3	.9		.1	15.7
Douglas fir	3,256		6.6	8.0	85.1	19.9	1.3	2.7	2.7	6.6			132.9
Engelmann spruce	2,032	6.0		6.0	9.9	17.8	9.9	4.0	132.9	9.9		2.0	198.4
Lodgepole pine	2,267		4.1	7.4	7.4	1.7			8.2	53.5			82.3
Total	83,347	908.3	520.8	1,542.2	1,374.9	198.2	281.4	418.0	402.0	346.3	5.2	15.1	6,012.4
Sawtimber													
Western white pine	5,593	74.3	2.0	22.1	16.0	14.0	22.1	22.1	26.1	2.0			200.7
Ponderosa pine	9,035	1.6	100.0	26.2	31.2	1.6				3.3			163.9
Larch-Douglas fir	9,377	12.8	22.4	169.7	86.4	9.6	6.4	3.2	6.4	3.2			320.1
Hemlock-white fir	38					.4	.1	.2	.3				1.0
Douglas fir	32		.1	.1	.6								.8
Engelmann spruce	2,075	6.4		6.4	1.3	20.3	6.4	2.5	80.0	3.8			127.1
Lodgepole pine	33			.1		.1			.2	.4			.8
Western red cedar	281	.9		.4	.3	.4	7.2	3.2	.9				13.3
Cedar-white fir													
Total	26,464	96.0	124.5	225.0	135.8	46.4	42.2	31.2	113.9	12.7			827.7
Total													
Western white pine	47,929	1,071.7	35.3	853.3	448.2	97.1	221.5	514.1	225.5	35.3	6.6	16.6	3,525.2
Ponderosa pine	45,440	42.2	1,034.1	330.8	640.4	22.0	20.4			104.8			2,194.7
Larch-Douglas fir	61,126	168.2	84.5	1,288.7	1,081.2	134.0	161.8	34.3	161.8	314.1			3,428.6
Hemlock-white fir	205	.2		.3	.6	3.8	3.7	5.5	1.6	.9		.1	16.7
Douglas fir	4,118		8.3	10.0	106.1	24.7	1.6	3.3	3.3	8.2			165.5
Engelmann spruce	4,739	13.1		13.1	12.4	40.3	17.5	7.0	229.2	14.9		2.3	349.8
Lodgepole pine	4,959		6.4	11.7	11.6	2.7			13.1	84.2			129.7
Western red cedar	281	.9		.4	.3	.4	7.2	3.2	.9				13.3
Cedar-white fir	408	1.4		2.7	1.9	2.7	12.0	2.5	4.1				27.3
Total	169,205	1,297.7	1,168.6	2,511.0	2,302.7	327.7	445.7	569.9	639.5	562.4	6.6	19.0	9,850.8

HJP 3/13/39

RE-NRM
Forest Survey
Growth Phase

BOUNDARY COUNTY

Table 28. - Net current annual cubic foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	23,546	324.8	10.8	270.6	140.7	27.1	65.0	160.2	65.0	10.8	2.2	5.4	1,082.6
Ponderosa pine	3,825	4.8	110.5	36.0	72.0	2.4	2.4			12.0			240.1
Larch-Douglas fir	27,197	83.7	33.5	602.8	535.9	67.0	83.7	16.7	83.7	167.5			1,674.5
Hemlock-white fir	76	.1		.1	.3	1.5	1.6	2.3	.5	.4			6.8
Douglas fir	1,023		2.7	3.3	35.2	8.3	.6	1.1	1.1	2.7			55.0
Engelmann spruce	1,567	1.8		1.8	3.0	5.5	3.0	1.3	40.8	3.0		.6	60.8
Lodgepole pine	15,856		20.1	36.2	36.2	8.0			40.1	261.2			401.8
Cedar-white fir													
Total	73,090	415.2	177.6	950.8	823.3	119.8	156.3	181.6	231.2	457.6	2.2	6.0	3,521.6
Pole													
Western white pine	34,410	1,256.3	41.9	1,047.0	544.4	104.7	251.3	619.8	251.3	41.9	8.4	20.9	4,187.9
Ponderosa pine	6,529	7.4	170.1	55.5	111.0	3.7	3.7			18.5			369.9
Larch-Douglas fir	30,660	104.1	41.7	749.9	666.5	83.3	104.1	20.8	104.1	208.3			2,082.8
Hemlock-white fir													
Douglas fir	2,453		7.3	8.7	93.2	21.9	1.5	2.9	2.9	7.3			145.7
Engelmann spruce	8,324	24.9		24.9	41.5	74.8	41.5	16.7	556.6	41.5		8.3	830.7
Lodgepole pine	16,554		32.9	59.2	59.2	13.2			65.8	427.7			658.0
Total	98,930	1,392.7	293.9	1,945.2	1,515.8	301.6	402.1	660.2	980.7	745.2	8.4	29.2	8,275.0
Sawtimber													
Western white pine	8,115	112.1	3.1	33.3	24.2	21.2	33.3	33.3	39.4	3.1			303.0
Ponderosa pine	12,370	1.8	108.9	28.5	33.9	1.8				3.6			178.5
Larch-Douglas fir	12,424	15.1	26.4	199.9	101.9	11.3	7.5	3.8	7.5	3.8			377.2
Hemlock-white fir													
Douglas fir													
Engelmann spruce	5,790	16.6		16.6	3.3	53.1	16.6	6.6	209.0	10.0			331.8
Lodgepole pine	171	.2		.4	.2	.7			1.5	3.0			6.0
Western red cedar	825	2.4		1.0	.7	1.0	18.1	8.0	2.4				33.6
Cedar-white fir	164	.6		1.2	.6	.9	5.1	.7	2.7				11.8
Total	39,859	148.8	138.4	280.9	164.8	90.0	80.6	52.4	262.5	23.5			1,241.9
Total													
Western white pine	66,071	1,693.2	55.8	1,350.9	709.3	153.0	349.6	813.3	355.7	55.8	10.6	26.3	5,573.5
Ponderosa pine	22,724	14.0	389.5	120.0	216.9	7.9	6.1			34.1			788.5
Larch-Douglas fir	70,281	202.9	101.6	1,552.6	1,304.3	161.6	195.3	41.3	195.3	379.6			4,134.5
Hemlock-white fir	76	.1		.1	.3	1.5	1.6	2.3	.5	.4			6.8
Douglas fir	3,476		10.0	12.0	128.4	30.2	2.1	4.0	4.0	10.0			200.7
Engelmann spruce	15,681	43.3		43.3	47.8	133.4	61.1	24.6	806.4	54.5		8.9	1,223.3
Lodgepole pine	32,581	.2	53.0	95.8	95.6	21.9			107.4	691.9			1,065.8
Western red cedar	825	2.4		1.0	.7	1.0	18.1	8.0	2.4				33.6
Cedar-white fir	164	.6		1.2	.6	.9	5.1	.7	2.7				11.8
Total	211,879	1,956.7	609.9	3,176.9	2,503.9	511.4	639.0	894.2	1,474.4	1,226.3	10.6	35.2	13,038.5

HJP 3/14/39

RE-NRM
Forest Survey
Growth Phase

CLEARWATER COUNTY

Table 29. - Net current annual board foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	54,563												
Ponderosa pine	5,352		16	3	6	1				1			27
Larch-Douglas fir	12,807												
Hemlock-white fir													
Douglas fir	2,457												
Engelmann spruce													
Lodgepole pine	576												
Western red cedar													
Cedar-white fir	2,088												
Total	77,843		16	3	6	1				1			27
Pole													
Western white pine	36,172	2,329		621	1,940	1,863	388	39	78	388	39	78	7,763
Ponderosa pine	17,433		1,695	254	593	141				141			2,824
Larch-Douglas fir	21,933	17	11	134	290	78	17			6		6	559
Hemlock-white fir													
Douglas fir	5,387	3	8	6	87	19	1			1			125
Engelmann spruce													
Lodgepole pine	1,422	2	9	19	19	9			2	125			185
Western red cedar	115			1	1	2	10						14
Cedar-white fir	2,862	7		17	23	61	61		4	2			175
Total	85,324	2,358	1,723	1,052	2,953	2,173	477	39	84	663	39	84	11,645
Sawtimber													
Western white pine	290,473	73,208	1,408	8,447	16,894	28,157	8,447		4,224				140,785
Ponderosa pine	61,021	97	5,320	871	2,708	580				97			9,673
Larch-Douglas fir	51,746	332	332	1,993	2,658	1,063	133		66	66			6,643
Hemlock-white fir	2,655	16	5	32	64	387	11	11	5				531
Douglas fir	10,179	51	71	20	671	194	10						1,017
Engelmann spruce	783	23		18	25	27	2		132				227
Lodgepole pine	774	9	9	9	8	1			1	67			104
Western red cedar	1,322	21		8	11	35	184		8				267
Cedar-white fir	9,957	120	30	120	151	557	497		30				1,505
Total	428,910	73,877	7,175	11,518	23,190	31,001	9,284	11	4,466	230			160,752
Total													
Western white pine	381,208	75,537	1,408	9,068	18,834	30,020	8,835	39	4,302	388	39	78	148,548
Ponderosa pine	83,806	97	7,031	1,128	3,307	722				239			12,524
Larch-Douglas fir	86,486	349	343	2,127	2,948	1,141	150		66	72		6	7,202
Hemlock-white fir	2,655	16	5	32	64	387	11	11	5				531
Douglas fir	18,023	54	79	26	758	213	11			1			1,142
Engelmann spruce	783	23		18	25	27	2		132				227
Lodgepole pine	2,772	11	18	28	27	10			3	192			289
Western red cedar	1,437	21		9	12	37	194		8				281
Cedar-white fit	14,907	127	30	137	174	618	558		34	2			1,680
Total	592,077	76,235	8,914	12,573	26,149	33,175	9,761	50	4,550	894	39	84	172,424

HJP 3/15/39.

RE-NRM
Forest Survey
Growth Phase

CLEARWATER COUNTY

Table 30. - Net current annual board foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	91,413												
Ponderosa pine	13												
Larch-Douglas fir	6,051												
Hemlock-white fir	159												
Douglas fir	1,304												
Engelmann spruce	68												
Lodgepole pine	3,785												
Western red cedar	96												
Cedar-white fir	520												
Total	103,409												
Pole													
Western white pine	33,046	1,031		275	859	825	172	17	34	172	17	34	3,436
Ponderosa pine	30												
Larch-Douglas fir	4,109	5	4	43	93	25	5			2		2	179
Hemlock-white fir	1,664												
Douglas fir	2,191	1	4	3	45	10	1			1			65
Engelmann spruce	80	2		1	2	2			11				18
Lodgepole pine	102												
Western red cedar													
Cedar-white fir	1,750	7		18	24	64	64		4	2			183
Total	42,972	1,046	8	340	1,023	926	242	17	49	177	17	36	3,881
Sawtimber													
Western white pine	80,423	20,351	391	2,348	4,697	7,827	2,348		1,174				39,136
Ponderosa pine	2,068	3	164	27	84	18				3			299
Larch-Douglas fir	8,753	77	77	461	615	246	31		15	15			1,537
Hemlock-white fir	92	1		1	2	13							17
Douglas fir	2,056	7	11	3	99	28	1						149
Engelmann spruce	1,591	32		26	35	38	3		186				320
Lodgepole pine	103	1	1	1						6			9
Western red cedar	859	7		3	4	12	65		3				94
Cedar-white fir	2,123	29	7	29	35	131	117		7				355
Total	98,068	20,508	651	2,899	5,571	8,313	2,565		1,385	24			41,916
Total													
Western white pine	204,882	21,382	391	2,623	5,556	8,652	2,520	17	1,208	172	17	34	42,572
Ponderosa pine	2,111	3	164	27	84	18				3			299
Larch-Douglas fir	18,913	82	81	504	708	271	36		15	17		2	1,716
Hemlock-white fir	1,915	1		1	2	13							17
Douglas fir	5,551	8	15	6	144	38	2			1			214
Engelmann spruce	1,739	34		27	37	40	3		197				338
Lodgepole pine	3,990	1	1	1						6			9
Western red cedar	955	7		3	4	12	65		3				94
Cedar-white fir	4,393	36	7	47	59	195	181		11	2			538
Total	244,449	21,554	659	3,239	6,594	9,239	2,807	17	1,434	201	17	36	45,797

HJP 3/15/39

RE-NRM
Forest Survey
Growth Phase

CLEARWATER COUNTY

Table 31. - Net current annual cubic foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	54,563	537.8		143.4	448.2	430.2	89.6	9.0	17.9	89.6	9.0	17.9	1,792.6
Ponderosa pine	5,352		187.6	28.2	65.7	15.6				15.6			312.7
Larch-Douglas fir	12,807	16.0	10.6	127.8	276.8	74.5	16.0			5.3		5.3	532.3
Hemlock-white fir													
Douglas fir	2,457	2.5	7.4	6.2	86.0	18.4	1.2			1.2			122.9
Engelmann spruce													
Lodgepole pine	576	.1	.5	.9	.9	.5			.1	6.3			9.3
Western red cedar													
Cedar-white fir	2,038	1.4		3.5	4.6	12.4	12.4		.7	.4			35.4
Total	77,843	557.8	206.1	310.0	882.2	551.6	119.2	9.0	18.7	118.4	9.0	23.2	2,805.2
Pole													
Western white pine	36,172	1,354.3		361.2	1,128.6	1,083.4	225.7	22.6	45.1	225.7	22.6	45.1	4,514.3
Ponderosa pine	17,433		605.6	90.8	212.0	50.5				50.5			1,009.4
Larch-Douglas fir	21,933	31.7	21.1	253.4	549.0	147.8	31.7			10.5		10.5	1,055.7
Hemlock-white fir													
Douglas fir	5,387	5.6	16.7	13.9	195.3	41.9	2.8			2.8			279.0
Engelmann spruce													
Lodgepole pine	1,422	.6	3.2	6.4	6.4	3.2			.6	43.3			63.7
Western red cedar	115	.3		.5	.5	1.2	6.5		.3				9.3
Cedar-white fir	2,862	9.6		24.0	31.2	84.0	84.0		4.8	2.4			240.0
Total	85,324	1,402.1	646.6	750.2	2,123.0	1,412.0	350.7	22.6	50.8	335.2	22.6	55.6	7,171.4
Sawtimber													
Western white pine	290,473	11,874.8	228.3	1,370.2	2,740.3	4,567.2	1,370.2		685.1				22,836.1
Ponderosa pine	61,021	11.8	651.4	106.6	331.7	71.1				11.8			1,184.4
Larch-Douglas fir	51,746	92.3	92.3	553.6	738.1	295.3	36.9		18.4	18.4			1,845.3
Hemlock-white fir	2,655	3.8	1.3	7.5	15.1	91.7	2.5	2.5	1.3				125.7
Douglas fir	10,179	16.9	23.7	6.8	223.5	64.4	3.4						338.7
Engelmann spruce	783	4.8		3.8	5.2	5.7	.5		27.6				47.6
Lodgepole pine	774	2.6	2.6	2.6	2.3	.3			.3	18.0			28.7
Western red cedar	1,322	4.7		1.7	2.3	7.5	39.9		1.7				57.8
Cedar-white fir	9,957	29.8	7.5	29.8	37.2	137.9	122.9		7.5				372.6
Total	428,910	12,041.5	1,007.1	2,082.6	4,095.7	5,241.1	1,576.3	2.5	741.9	48.2			26,836.9
Total													
Western white pine	381,208	13,766.9	228.3	1,874.8	4,317.1	6,080.8	1,685.5	31.6	748.1	315.3	31.6	63.0	29,143.0
Ponderosa pine	83,806	11.8	1,444.6	225.6	609.4	137.2				77.9			2,506.5
Larch-Douglas fir	86,486	140.0	124.0	934.8	1,563.9	517.6	84.6		18.4	34.2		15.8	3,433.3
Hemlock-white fir	2,655	3.8	1.3	7.5	15.1	91.7	2.5	2.5	1.3				125.7
Douglas fir	18,023	25.0	47.8	26.9	504.8	124.7	7.4			4.0			740.6
Engelmann spruce	783	4.8		3.8	5.2	5.7	.5		27.6				47.6
Lodgepole pine	2,772	3.3	6.3	9.9	9.6	4.0			1.0	67.6			101.7
Western red cedar	1,437	5.0		2.2	2.8	8.7	46.4		2.0				67.1
Cedar-white fir	14,907	40.8	7.5	57.3	73.0	234.3	219.3		13.0	2.8			648.0
Total	592,077	14,001.4	1,859.8	3,142.8	7,100.9	7,204.7	2,046.2	34.1	811.4	501.8	31.6	78.8	36,813.5

HJP 3/15/59

RE-NRM
Forest Survey
Growth Phase

CLEARWATER COUNTY

Table 32. - Net current annual cubic foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	91,413	723.2		192.9	602.7	578.6	120.5	12.0	24.1	120.5	12.0	24.1	2,410.6
Ponderosa pine	13		.6	.1	.2								.9
Larch-Douglas fir	6,051	8.4	5.6	67.4	146.0	39.3	8.4			2.8		2.8	280.7
Hemlock-white fir	159			.1	.2	1.1							1.4
Douglas fir	1,304	1.4	4.2	3.5	49.4	10.6	.7			.7			70.5
Engelmann spruce	68	.1			.1	.1			.3				.6
Lodgepole pine	3,785	.2	1.0	1.9	1.9	1.0			.2	13.1			19.3
Western red cedar	96	.2		.2	.2	.6	3.3		.2				4.7
Cedar-white fir	520	.4		.9	1.1	3.1	3.1		.2	.1			8.9
Total	103,409	733.9	11.4	267.0	801.8	634.4	136.0	12.0	25.0	137.2	12.0	26.9	2,797.6
Pole													
Western white pine	33,046	1,205.5		321.5	1,004.6	964.4	200.9	20.1	40.2	200.9	20.1	40.2	4,018.4
Ponderosa pine	30		1.0	.2	.4	.1				.1			1.8
Larch-Douglas fir	4,109	7.1	4.7	56.3	122.1	32.9	7.1			2.3		2.3	234.8
Hemlock-white fir	1,664	4.6		10.8	18.4	110.6	4.6	1.5	1.5			1.5	153.5
Douglas fir	2,191	2.3	7.0	5.8	81.8	17.5	1.2			1.2			116.8
Engelmann spruce	80	.7		.6	.9	.7	.1	.1	4.8	.1		.1	8.1
Lodgepole pine	102		.2	.4	.4	.2				2.8			4.0
Western red cedar													
Cedar-white fir	1,750	5.8		14.4	18.7	50.2	50.2		2.9	1.4			143.6
Total	42,972	1,226.0	12.9	410.0	1,247.3	1,176.6	264.1	21.7	49.4	208.8	20.1	44.1	4,681.0
Sawtimber													
Western white pine	80,423	3,366.0	64.7	388.4	776.8	1,294.6	388.4		194.2				6,473.1
Ponderosa pine	2,068	.4	19.4	3.2	9.8	2.1				.4			35.3
Larch-Douglas fir	8,753	14.4	14.4	86.5	115.3	46.1	5.8		2.9	2.9			288.3
Hemlock-white fir	92	.2	.1	.5	.9	6.0	.2	.2	.1				8.2
Douglas fir	2,056	2.9	4.1	1.2	38.2	11.0	.6						58.0
Engelmann spruce	1,591	7.4		6.0	8.2	8.9	.7		43.2				74.4
Lodgepole pine	103	.2	.2	.2	.2					1.5			2.3
Western red cedar	859	2.3		.9	1.1	3.7	19.7		.9				28.6
Cedar-white fir	2,123	6.8	1.7	6.8	8.5	31.5	28.0		1.7				85.0
Total	98,068	3,400.6	104.6	493.7	959.0	1,403.9	443.4	.2	243.0	4.8			7,053.2
Total													
Western white pine	204,882	5,294.7	64.7	902.8	2,384.1	2,837.6	709.8	32.1	258.5	321.4	32.1	64.3	12,902.1
Ponderosa pine	2,111	.4	21.0	3.5	10.4	2.2				.5			38.0
Larch-Douglas fir	18,913	29.9	24.7	210.2	383.4	118.3	21.3		2.9	8.0		5.1	803.8
Hemlock-white fir	1,915	4.8	.1	11.4	19.5	117.7	4.8	1.7	1.6			1.5	163.1
Douglas fir	5,551	6.6	15.3	10.5	169.4	39.1	2.5			1.9			245.3
Engelmann spruce	1,739	8.2		6.6	9.2	9.7	.8	.1	48.3	.1		.1	83.1
Lodgepole pine	3,990	.4	1.4	2.5	2.5	1.2			.2	17.4			25.6
Western red cedar	955	2.5		1.1	1.3	4.3	23.0		1.1				33.3
Cedar-white fir	4,393	13.0	1.7	22.1	28.3	84.8	81.3		4.8	1.5			237.5
Total	244,449	5,360.5	128.9	1,170.7	3,008.1	3,214.9	843.5	33.9	317.4	350.8	32.1	71.0	14,531.8

HJP 3/15/39

RE-NRM
Forest Survey
Growth Phase

IDAHO COUNTY

Table 33. - Net current annual board foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	48												
Ponderosa pine	12,152		56	3	23	2				3			87
Larch-Douglas fir	1,288												
Hemlock-white fir	971												
Douglas fir	4,542												
Engelmann spruce	394												
Lodgepole pine	8,033	1	1	3	7				15	78		7	112
Western red cedar	270												
Cedar-white fir	2,158												
Total	29,856	1	57	6	30	2			15	81		7	199
Pole													
Western white pine													
Ponderosa pine	49,422		3,775	174	1,510	116				232			5,807
Larch-Douglas fir	3,267	2	5	79	102	21	7		9	5		2	232
Hemlock-white fir	451	1	1	5	25	83	3		5			1	124
Douglas fir	20,930	2	9	6	124	9	2		10	5		3	170
Engelmann spruce	92			2	6	6			59	2		4	79
Lodgepole pine	8,440	8	8	25	48				105	565		48	807
Cedar-white fir	3,563	5		13	53	127	59		3			5	265
Total	86,165	18	3,798	304	1,868	362	71		191	809		63	7,484
Sawtimber													
Western white pine	195	16	2	4	8	7	5		2	1			45
Ponderosa pine	82,834		8,648	111	1,774	444			111				11,088
Larch-Douglas fir	12,820	28	86	1,224	939	228	28		228	57		28	2,846
Hemlock-white fir	7,583		42	42	229	1,563	21		125	42		21	2,085
Douglas fir	13,908	16	109	47	1,061	187	31		62	31		16	1,560
Engelmann spruce	215			2	4	2			40	2		5	55
Lodgepole pine	486		1	2	9	1			1	25			39
Western red cedar	104	1		1	3	3	20		1				29
Cedar-white fir	2,069	17	17	7	58	141	96		7				343
Total	120,214	78	8,905	1,440	4,085	2,576	201		577	158		70	18,090
Total													
Western white pine	243	16	2	4	8	7	5		2	1			45
Ponderosa pine	144,408		12,479	288	3,307	562			111	235			16,982
Larch-Douglas fir	17,375	30	91	1,303	1,041	249	35		237	62		30	3,078
Hemlock-white fir	9,005	1	43	47	254	1,646	24		130	42		22	2,209
Douglas fir	39,380	18	118	53	1,185	196	33		72	36		19	1,730
Engelmann spruce	701			4	10	8			99	4		9	134
Lodgepole pine	16,959	9	10	30	64	1			121	668		55	958
Western red cedar	374	1		1	3	3	20		1				29
Cedar-white fir	7,790	22	17	20	111	268	155		10			5	608
Total	236,235	97	12,760	1,750	5,983	2,940	272		783	1,048		140	25,773

HJP 3/17/39

RE-NRM
Forest Survey
Growth Phase

IDAHO COUNTY

Table 34. - Net current annual board foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	10,723												
Ponderosa pine	11,399		17	1	6	1				1			26
Larch-Douglas fir	12,188												
Hemlock-white fir	3,481												
Douglas fir	10,843												
Engelmann spruce	1,740												
Lodgepole pine	29,139	6	6	19	37				81	432		37	618
Western red cedar	1,004												
Cedar-white fir	22,613	1		2	7	17	7					1	35
Total	103,130	7	23	22	50	18	7		81	433		38	679
Pole													
Western white pine	2,415												
Ponderosa pine	9,148		848	39	339	26				52			1,304
Larch-Douglas fir	28,396	20	39	664	860	176	59		78	39		19	1,954
Hemlock-white fir	7,862	6	6	24	121	403	12		24			6	602
Douglas fir	28,903	12	57	46	838	57	11		69	34		23	1,147
Engelmann spruce	6								1				1
Lodgepole pine	76,576	57	57	172	344				746	4,015		344	5,735
Western red cedar													
Cedar-white fir	14,498	10		24	98	235	107		5			10	489
Total	167,804	105	1,007	969	2,600	897	189		923	4,140		402	11,232
Sawtimber													
Western white pine	22,767	3,228	369	830	1,752	1,476	922		369	184		92	9,222
Ponderosa pine	101,321		10,471	134	2,148	537			134				13,424
Larch-Douglas fir	47,385	109	329	4,718	3,621	878	110		877	219		110	10,971
Hemlock-white fir	17,510		50	50	276	1,878	25		150	50		25	2,504
Douglas fir	44,595	51	357	153	3,472	613	102		204	102		51	5,105
Engelmann spruce	6,012			36	83	48			870	36		119	1,192
Lodgepole pine	739		2	1	13	2			2	34			54
Western red cedar	433	7		5	14	14	103		7				150
Cedar-white fir	35,425	314	314	126	1,067	2,573	1,757		125				6,276
Total	276,187	3,709	11,892	6,053	12,446	8,019	3,019		2,738	625		397	48,898
Total													
Western white pine	35,905	3,228	369	830	1,752	1,476	922		369	184		92	9,222
Ponderosa pine	121,868		11,336	174	2,493	564			134	53			14,754
Larch-Douglas fir	87,969	129	368	5,382	4,481	1,054	169		955	258		129	12,925
Hemlock-white fir	28,853	6	56	74	397	2,281	37		174	50		31	3,106
Douglas fir	84,341	63	414	199	4,310	670	113		273	136		74	6,252
Engelmann spruce	7,758			36	83	48			871	36		119	1,193
Lodgepole pine	106,454	63	65	192	394	2			829	4,481		381	6,407
Western red cedar	1,437	7		5	14	14	103		7				150
Cedar-white fir	72,536	325	314	152	1,172	2,825	1,871		130			11	6,800
Total	547,121	3,821	12,922	7,044	15,096	8,934	3,215		3,742	5,198		837	60,809

HJP 3/16/39

RE-NRM
Forest Survey
Growth Phase

IDAHO COUNTY

Table 35. - Net current annual cubic foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	48	.2			.2	.2							.6
Ponderosa pine	12,152		440.4	20.3	176.2	13.6				27.1			677.6
Larch-Douglas fir	1,288	.7	1.5	24.8	32.2	6.6	2.2		2.9	1.5		.7	73.1
Hemlock-white fir	971	.7	.7	2.9	14.6	48.7	1.5		2.9			.7	72.7
Douglas fir	4,542	2.5	12.4	10.0	181.6	12.4	2.5		14.9	7.5		5.0	248.8
Engelmann spruce	394			1.1	2.5	2.5			26.6	1.1		1.7	35.5
Lodgepole pine	8,033	2.6	2.6	7.7	15.4				33.5	180.3		15.4	257.5
Western red cedar	270	1.4		.7	2.0	1.8	16.1		.7				22.7
Cedar-white fir	2,158	.5		1.3	5.0	12.1	5.5		.3			.5	25.2
Total	23,856	8.6	457.6	68.8	429.7	97.9	27.8		81.8	217.5		24.0	1,413.7
Pole													
Western white pine													
Ponderosa pine	49,422		1,705.1	78.7	682.0	52.5				104.9			2,623.2
Larch-Douglas fir	3,267	2.4	4.7	80.5	104.2	21.3	7.1		9.5	4.7		2.4	236.8
Hemlock-white fir	451	.4	.4	1.5	7.4	24.7	.7		1.5			.4	37.0
Douglas fir	20,930	10.4	52.1	41.7	761.0	52.1	10.4		62.6	31.3		20.9	1,042.5
Engelmann spruce	92			.3	.8	.8			8.3	.3		.6	11.1
Lodgepole pine	8,440	3.0	3.0	9.0	18.1				39.1	210.5		18.1	300.8
Cedar-white fir	3,563	5.3		13.4	53.4	128.1	58.7		2.7			5.3	266.9
Total	86,165	21.5	1,765.3	225.1	1,626.9	279.5	76.9		123.7	351.7		47.7	4,518.3
Sawtimber													
Western white pine	195	2.5	.3	.6	1.4	1.2	.7		.3	.1		.1	7.2
Ponderosa pine	82,834		1,104.0	14.2	226.5	56.6			14.2				1,415.5
Larch-Douglas fir	12,820	4.4	13.1	187.7	144.0	34.9	4.4		34.9	8.7		4.4	436.5
Hemlock-white fir	7,583		8.1	8.1	44.5	303.3	4.0		24.3	8.1		4.0	404.4
Douglas fir	13,908	3.9	27.2	11.6	264.5	46.7	7.8		15.5	7.8		3.9	388.9
Engelmann spruce	215			.3	.7	.4			7.5	.3		1.1	10.3
Lodgepole pine	486		.3	.3	2.0	.3			.3	5.2			8.4
Western red cedar	104	.3		.2	.5	.5	4.1		.3				5.9
Cedar-white fir	2,069	4.1	4.1	1.6	13.8	33.3	22.8		1.6				81.3
Total	120,214	15.2	1,157.1	224.6	697.9	477.2	43.8		98.9	30.2		13.5	2,758.4
Total													
Western white pine	243	2.7	.3	.6	1.6	1.4	.7		.3	.1		.1	7.8
Ponderosa pine	144,408		3,249.5	113.2	1,084.7	122.7			14.2	132.0			4,716.3
Larch-Douglas fir	17,375	7.5	19.3	293.0	280.4	62.8	13.7		47.3	14.9		7.5	746.4
Hemlock-white fir	9,005	1.1	9.2	12.5	66.5	376.7	6.2		28.7	8.1		5.1	514.1
Douglas fir	39,380	16.8	91.7	63.3	1,207.1	111.2	20.7		93.0	46.6		29.8	1,680.2
Engelmann spruce	701			1.7	4.0	3.7			42.4	1.7		3.4	56.9
Lodgepole pine	16,959	5.6	5.9	17.0	35.5	.3			72.9	396.0		33.5	566.7
Western red cedar	374	1.7		.9	2.5	2.3	20.2		1.0				28.6
Cedar-white fir	7,790	9.9	4.1	16.3	72.2	173.5	87.0		4.6			5.8	373.4
Total	236,235	45.3	3,380.0	518.5	2,754.5	854.6	148.5		304.4	599.4		85.2	8,690.4

HJP 3/16/39

RE-NRM
Forest Survey
Growth Phase

IDAHO COUNTY

Table 36. - Net current annual cubic foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of cubic feet.

Forest type	Area (acres)	Species											
		Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	10,723	152.0		60.8	152.0	170.3	12.1	3.0	18.3	30.4	3.0	6.1	608.0
Ponderosa pine	11,399		497.4	23.0	198.9	15.3				30.6			765.2
Larch-Douglas fir	12,188	7.8	15.7	267.2	345.8	70.7	23.6		31.4	15.7		7.9	785.8
Hemlock-white fir	3,481	2.4	2.4	9.8	48.9	163.7	4.9		9.8			2.5	244.4
Douglas fir	10,843	5.1	25.4	20.4	372.0	25.5	5.1		30.6	15.3		10.2	509.6
Engelmann spruce	1,740			3.5	8.2	8.2			87.8	3.5		5.9	117.1
Lodgepole pine	29,139	8.8	8.7	26.2	52.5				113.7	612.1		52.5	874.5
Western red cedar	1,004	3.9		1.9	5.8	5.2	46.0		2.0				64.8
Cedar-white fir	22,613	9.5		23.9	95.4	229.0	104.9		4.8			9.5	477.0
Total	103,130	189.5	549.6	436.7	1,279.5	687.9	196.6	3.0	298.4	707.6	3.0	94.6	4,446.4
Pole													
Western white pine	2,415	70.2		28.1	70.2	78.7	5.6	1.4	8.4	14.1	1.4	2.8	280.9
Ponderosa pine	9,148		284.8	13.2	113.9	8.8				17.5			438.2
Larch-Douglas fir	28,396	15.0	29.9	508.4	657.9	134.6	44.9		59.8	29.9		14.9	1,495.3
Hemlock-white fir	7,862	5.7	5.8	22.9	114.6	383.9	11.5		22.9			5.7	573.0
Douglas fir	28,903	14.5	72.8	58.2	1,062.7	72.8	14.6		87.3	43.7		29.1	1,455.7
Engelmann spruce	6								.2				.2
Lodgepole pine	76,576	28.6	28.6	85.8	171.6				371.8	2,001.7		171.6	2,859.7
Western red cedar													
Cedar-white fir	14,498	21.9		54.7	218.8	525.1	240.7		10.9			21.9	1,094.0
Total	167,804	155.9	421.9	771.3	2,409.7	1,203.9	317.3	1.4	561.3	2,106.9	1.4	246.0	8,197.0
Sawtimber													
Western white pine	22,767	513.6	58.7	132.1	278.8	234.8	146.7		58.7	29.4		14.7	1,467.5
Ponderosa pine	101,321		1,272.3	16.3	261.0	65.2			16.3				1,631.1
Larch-Douglas fir	47,385	15.7	47.0	673.7	517.1	125.3	15.7		125.3	31.3		15.7	1,566.8
Hemlock-white fir	17,510		13.6	13.5	74.7	509.5	6.8		40.8	13.6		6.8	679.3
Douglas fir	44,595	11.9	83.0	35.5	806.2	142.3	23.7		47.4	23.7		11.9	1,185.6
Engelmann spruce	6,012			7.8	18.1	10.4			189.1	7.8		25.9	259.1
Lodgepole pine	739		.4	.6	3.4	.4			.4	8.8			14.0
Western red cedar	433	1.3		.8	2.4	2.4	18.3		1.3				26.5
Cedar-white fir	35,425	69.5	69.5	27.8	236.5	570.3	389.5		27.8				1,390.9
Total	276,187	612.0	1,544.5	908.1	2,198.2	1,660.6	600.7		507.1	114.6		75.0	8,220.8
Total													
Western white pine	35,905	735.8	58.7	221.0	501.0	483.8	164.4	4.4	85.4	73.9	4.4	23.6	2,356.4
Ponderosa pine	121,868		2,054.5	52.5	573.8	89.3			16.3	48.1			2,834.5
Larch-Douglas fir	87,969	38.5	92.6	1,449.3	1,520.8	330.6	84.2		216.5	76.9		38.5	3,847.9
Hemlock-white fir	28,853	8.1	21.8	46.2	238.2	1,057.1	23.2		73.5	13.6		15.0	1,496.7
Douglas fir	84,341	31.5	181.2	114.1	2,240.9	240.6	43.4		165.3	82.7		51.2	3,150.9
Engelmann spruce	7,758			11.3	26.3	18.6			277.1	11.3		31.8	376.4
Lodgepole pine	106,454	37.4	37.7	112.6	227.5	.4			485.9	2,622.6		224.1	3,748.2
Western red cedar	1,437	5.2		2.7	8.2	7.6	64.3		3.3				91.3
Cedar-white fir	72,536	100.9	69.5	106.4	550.7	1,324.4	735.1		43.5			31.4	2,961.9
Total	547,121	957.4	2,516.0	2,116.1	5,887.4	3,552.4	1,114.6	4.4	1,366.8	2,929.1	4.4	415.6	20,864.2

HJP & LJC 3/16/39

RE-NRM
Forest Survey
Growth Phase

KOOTENAI COUNTY

Table 37. - Net current annual board foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	11,595												
Ponderosa pine	21,636		6	1		2							9
Larch-Douglas fir	18,040			2	2	1							5
Hemlock-white fir	260												
Douglas fir	2,191												
Lodgepole pine	13,104												
Western red cedar	51												
Cedar-white fir	632												
Total	67,509		6	3	2	3							14
Pole													
Western white pine	27,118	762	21	423	317	212	64	233	64	21			2,117
Ponderosa pine	128,297	181	11,201	1,445	3,974	181				1,084			18,066
Larch-Douglas fir	67,351	169	127	1,271	1,228	614	212	42	127	424		21	4,235
Hemlock-white fir	2,470	23	5	36	86	205	23	66	5	5	2		456
Douglas fir	12,877	10	72	82	738	82		20		21			1,025
Lodgepole pine	3,715	2	3	5	9	9		1		65			94
Cedar-white fir	2,499	7		13	14	47	9	4	1			1	96
Total	244,327	1,154	11,429	3,275	6,366	1,350	308	366	197	1,620	2	22	26,089
Sawtimber													
Western white pine	5,245	479	11	127	181	159	11	64	21	11			1,064
Ponderosa pine	9,972	13	792	126	289	38							1,258
Larch-Douglas fir	10,114	98	78	567	841	274		59	19	19			1,955
Hemlock-white fir	157	3	1	5	12	28	2	8	1				60
Douglas fir	594	3	5	6	81	6		2	1	1			105
Lodgepole pine													
Cedar-white fir	136	3	1	4	6	15	3	1					33
Total	26,218	599	888	835	1,410	520	16	134	42	31			4,475
Total													
Western white pine	43,958	1,241	32	550	498	371	75	297	85	32			3,181
Ponderosa pine	159,905	194	11,999	1,572	4,263	221				1,084			19,333
Larch-Douglas fir	95,505	267	205	1,840	2,071	889	212	101	146	443		21	6,195
Hemlock-white fir	2,887	26	6	41	98	233	25	74	6	5	2		516
Douglas fir	15,662	13	77	88	819	88		22	1	22			1,130
Lodgepole pine	16,819	2	3	5	9	9		1		65			94
Western red cedar	51												
Cedar-white fir	3,267	10	1	17	20	62	12	5	1			1	129
Total	338,054	1,753	12,323	4,113	7,778	1,873	324	500	239	1,651	2	22	30,578

BB 3/17/39.

I-8-57

RE-NRM
Forest Survey
Growth Phase

KOOTENAI COUNTY

Table 38. - Net current annual board foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
					Species								
Seedling and sapling													
Western white pine	12,243												
Ponderosa pine	846		1										1
Larch-Douglas fir	15,886												
Hemlock-white fir	75												
Douglas fir	2,658												
Lodgepole pine	1,747												
Western red cedar	15												
Cedar-white fir	47												
Total	33,517		1										1
Pole													
Western white pine	40,135	1,863	52	1,035	776	517	155	569	155	52			5,174
Ponderosa pine	6,975	11	695	90	246	11				67			1,120
Larch-Douglas fir	24,002	80	60	600	581	290	100	20	60	200		10	2,001
Hemlock-white fir	1,488	6	1	10	24	58	6	19	1	1	1		127
Douglas fir	13,280	9	60	68	616	68		17		17			855
Lodgepole pine	593	1	1	2	3	4				25			36
Western red cedar													
Cedar-white fir	374	1		2	2	6	1	1					13
Total	86,847	1,971	869	1,807	2,248	954	262	626	216	362	1	10	9,326
Sawtimber													
Western white pine	15,183	1,805	40	481	682	602	40	241	80	40			4,011
Ponderosa pine	3,203	3	212	34	78	10							337
Larch-Douglas fir	7,121	84	68	490	726	236		51	17	17			1,689
Hemlock-white fir	384	2	1	4	10	24	2	7	1				51
Douglas fir	963	8	10	15	192	15		5	2	3			250
Lodgepole pine	111			1	2	1				6			10
Western red cedar													
Cedar-white fir													
Total	26,965	1,902	331	1,025	1,690	888	42	304	100	66			6,348
Total													
Western white pine	67,561	3,668	92	1,516	1,458	1,119	195	810	235	92			9,185
Ponderosa pine	11,024	14	908	124	324	21				67			1,458
Larch-Douglas fir	47,009	164	128	1,090	1,307	526	100	71	77	217		10	3,690
Hemlock-white fir	1,947	8	2	14	34	82	8	26	2	1	1		178
Douglas fir	16,901	17	70	83	808	83		22	2	20			1,105
Lodgepole pine	2,451	1	1	3	5	5				31			46
Western red cedar	15												
Cedar-white fir	421	1		2	2	6	1	1					13
Total	147,329	3,873	1,201	2,832	3,938	1,842	304	930	316	428	1	10	15,675

LJC 3/17/39.

RE-NRM
Forest Survey
Growth Phase

KOOTENAI COUNTY

Table 39. - Net current annual cubic foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of cubic feet.

Forest type	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
						Species							
Seedling and sapling													
Western white pine	11,595	143.1	4.0	79.5	59.7	39.8	11.9	43.7	11.9	4.0			397.6
Ponderosa pine	21,636	12.2	756,8	97.7	268.5	12.2				73.2			1,220.6
Larch-Douglas fir	18,040	46.5	34,9	349.1	337.5	168.7	58.2	11.6	34.9	116.4		5.8	1,163.6
Hemlock-white fir	260	.8	.2	1.4	3.3	7.7	.8	2.5	.2	.2	.1		17.2
Douglas fir	2,191	1.6	11.1	12.7	114.6	12.7		3.2		3.2			159.1
Lodgepole pine	13,104	3.1	4.7	7.9	15.7	15.7		1.6		108.4			157.1
Western red cedar	51	.5				.7	2.9	.7	.1				4.9
Cedar-white fir	632	1.9		3.8	4.1	13.3	2.4	1.1	.3			.3	27.2
Total	67,509	209.7	811.7	552.1	803.4	270,8	76.2	64.4	47.4	305.4	.1	6.1	3,147,3
Pole													
Western white pine	27,118	1,122.1	31.2	623.4	467.6	311.7	93.5	342.9	93.5	31.2			3,117.1
Ponderosa pine	128,297	61.1	3,792.2	489.3	1,345.6	61.1				367.0			6,116.3
Larch-Douglas fir	67,351	183.1	137.3	1,372.9	1,327.2	663.6	228.8	45.8	137.3	457.6		22.9	4,576.5
Hemlock-white fir	2,470	11.6	2.3	18.5	44.0	104.2	11.6	33.6	2.3	2.3	1.2		231.6
Douglas fir	12,877	8.6	60.2	68.7	618.7	68.7		17.2		17.2			859.3
Lodgepole pine	3,715	2.2	3.3	5.5	11.1	11.1		1.1		76.5			110.8
Cedar-white fir	2,499	13.9		27.9	29.9	97.6	17.9	8.0	2.0			2.0	199.2
Total	244,327	1,402.6	4,026.5	2,606.2	3,844.1	1,318.0	351.8	448.6	235.1	951.8	1.2	24.9	15,210.8
Sawtimber													
Western white pine	5,245	104.5	2.3	27.9	39.5	34.8	2.3	13.9	4.6	2.3			232.1
Ponderosa pine	9,972	1.6	100.6	16.0	36.7	4.8							159.7
Larch-Douglas fir	10,114	20.5	16.4	119.2	176.7	57.5		12.3	4.1	4.1			410.8
Hemlock-white fir	157	.6	.1	1.0	2.1	5.3	.4	1.6	.1				11.2
Douglas fir	594	.7	.9	1.4	17.7	1.4		.5	.2	.2			23.0
Lodgepole pine													
Cedar-white fir	136	.6	.1	.9	1.4	3.3	.6	.2					7.1
Total	26,218	128.5	120.4	166.4	274.1	107.1	3.3	28.5	9.0	6.6			843.9
Total													
Western white pine	43,958	1,369,7	37.5	730.8	566.8	386.3	107.7	400.5	110.0	37.5			3,746.8
Ponderosa pine	159,905	74.9	4,649.6	603.0	1,650.8	78.1				440.2			7,496.6
Larch-Douglas fir	95,505	250.1	188.6	1,841.2	1,841.4	889.8	287.0	69.7	176.3	578.1		28.7	6,150.9
Hemlock-white fir	2,887	13.0	2.6	20.9	49.4	117.2	12.8	37.7	2.6	2.5	1.3		260.0
Douglas fir	15,662	10.9	72.2	82.8	751.0	82.8		20.9	.2	20.6			1,041.4
Lodgepole pine	16,819	5.3	8.0	13.4	26.8	26.8		2.7		184.9			267.9
Western red cedar	51	.5				.7	2.9	.7	.1				4.9
Cedar-white fir	3,267	16.4	.1	32.6	35.4	114.2	20.9	9.3	2.3			2.3	233.5
Total	338,054	1,740.8	4,958.6	3,324.7	4,921.6	1,695.9	431.3	541.5	291.5	1,263.8	1.3	31.0	19,202.0

BB 3/17/39

RE-NRM
Forest Survey
Growth Phase

KOOTENAI COUNTY

Table 40. - Net current annual cubic foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species												
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Mountain hemlock	Alpine fir	Total
Seedling and sapling													
Western white pine	12,243	212.6	5.9	118.1	88.6	59.1	17.7	65.0	17.7	5.9			590.6
Ponderosa pine	846	.5	28.1	3.6	10.0	.4				2.7			45.3
Larch-Douglas fir	15,886	40.9	30.7	306.9	296.7	148.3	51.1	10.2	30.7	102.3		5.1	1,022.9
Hemlock-white fir	75	.4	.1	.6	1.5	3.6	.4	1.2	.1	.1			8.0
Douglas fir	2,658	2.0	13.9	15.8	142.9	15.9		4.0		4.0			198.5
Lodgepole pine	1,747	.7	1.1	1.9	3.7	3.7		.4		25.7			37.2
Western red cedar	15	.1				.3	.9	.2					1.5
Cedar-white fir	47	.2		.5	.5	1.5	.3	.1					3.1
Total	33,517	257.4	79.8	447.4	543.9	232.8	70.4	81.1	48.5	140.7		5.1	1,907.1
Pole													
Western white pine	40,135	1,736.3	48.2	964.6	723.5	482.3	144.7	530.5	144.7	48.2			4,823.0
Ponderosa pine	6,975	3.2	200.4	25.9	71.1	3.2				19.4			323.2
Larch-Douglas fir	24,002	69.0	51.8	517.6	500.4	250.2	86.3	17.3	51.8	172.5		8.6	1,725.5
Hemlock-white fir	1,488	7.8	1.6	12.5	29.7	70.4	7.8	22.6	1.6	1.6	.8		156.4
Douglas fir	13,280	9.7	67.5	77.2	694.6	77.2		19.3		19.3			964.8
Lodgepole pine	593	.4	.6	1.1	2.1	2.1		.2		14.3			20.8
Western red cedar													
Cedar-white fir	374	2.4		4.7	5.1	16.7	3.1	1.4	.3			.3	34.0
Total	86,847	1,828.8	370.1	1,603.6	2,026.5	902.1	241.9	591.3	198.4	275.3	.8	8.9	8,047.7
Sawtimber													
Western white pine	15,183	336.0	7.5	89.6	126.9	112.0	7.5	44.8	14.9	7.5			746.7
Ponderosa pine	3,203	.4	28.4	4.5	10.4	1.4							45.1
Larch-Douglas fir	7,121	12.2	9.8	71.0	105.3	34.3		7.3	2.4	2.4			244.7
Hemlock-white fir	384	.7	.1	1.3	2.8	7.0	.6	2.1	.2				14.8
Douglas fir	963	1.0	1.4	2.1	26.4	2.1		.7	.3	.3			34.3
Lodgepole pine	111	.1		.1	.4	.4				1.5			2.5
Western red cedar													
Cedar-white fir													
Total	26,965	350.4	47.2	168.6	272.2	157.2	8.1	54.9	17.8	11.7			1,088.1
Total													
Western white pine	67,561	2,284.9	61.6	1,172.3	939.0	653.4	169.9	640.3	177.3	61.6			6,160.3
Ponderosa pine	11,024	4.1	256.9	34.0	91.5	5.0				22.1			413.6
Larch-Douglas fir	47,009	122.1	92.3	895.5	902.4	432.8	137.4	34.8	84.9	277.2		13.7	2,993.1
Hemlock-white fir	1,947	8.9	1.8	14.4	34.0	81.0	8.8	25.9	1.9	1.7	.8		179.2
Douglas fir	16,901	12.7	82.8	95.1	863.9	95.2		24.0	.3	23.6			1,197.6
Lodgepole pine	2,451	1.2	1.7	3.1	6.2	6.2		.6		41.5			60.5
Western red cedar	15	.1				.3	.9	.2					1.5
Cedar-white fir	421	2.6		5.2	5.6	18.2	3.4	1.5	.3			.3	37.1
Total	147,329	2,436.6	497.1	2,219.6	2,842.6	1,292.1	320.4	727.3	264.7	427.7	.8	14.0	11,042.9

LJC 3/17/39

RE-NRM
Forest Survey
Growth Phase

LATAH COUNTY

Table 41. - Net current annual board foot increment by type, species, and general size class.
Available lands other than national forest, zone 1.[1]
Thousands of board feet log scale, Scribner rule.

Forest type	Species										
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Total
Seedling and sapling											
Western white pine	20,451										
Ponderosa pine	15,322										
Larch-Douglas fir	7,605			3	6	1	1				11
Hemlock-white fir	37										
Douglas fir	783										
Lodgepole pine	837										
Cedar-white fir	972										
Total	46,007			3	6	1	1				11
Pole											
Western white pine	25,944	352	12	211	199	234	59	35	12	59	1,173
Ponderosa pine	65,866	133	7,956	1,061	2,121	663				1,326	13,260
Larch-Douglas fir	24,484	60	40	603	1,005	100	100	20	21	60	2,009
Douglas fir	928	2	5	10	88	12				4	121
Lodgepole pine	2,734	1	1	2	3	3				23	33
Cedar-white fir	261	2	5	4	16	20	2		4		53
Total	120,217	550	8,019	1,891	3,432	1,032	161	55	37	1,472	16,649
Sawtimber											
Western white pine	13,847	2,026	211	718	591	506	84	42	42		4,220
Ponderosa pine	38,475	53	2,935	854	1,174	214	53			53	5,336
Larch-Douglas fir	19,437	128	255	1,701	1,531	553	42		42		4,252
Hemlock-white fir	80		1	4	5	10					20
Douglas fir	30		1	1	6	1					9
Western red cedar	35				1		1				2
Cedar-white fir	234			18	19	50	18	6	1		112
Total	72,138	2,207	3,403	3,296	3,327	1,334	198	48	85	53	13,951
Total											
Western white pine	60,242	2,378	223	929	790	740	143	77	54	59	5,393
Ponderosa pine	119,663	186	10,891	1,915	3,295	877	53			1,379	18,596
Larch-Douglas fir	51,526	188	295	2,307	2,542	654	143	20	63	60	6,272
Hemlock-white fir	117		1	4	5	10					20
Douglas fir	1,741	2	6	11	94	13				4	130
Lodgepole pine	3,571	1	1	2	3	3				23	33
Western red cedar	35				1		1				2
Cedar-white fir	1,467	2	5	22	35	70	20	6	5		165
Total	238,362	2,757	11,422	5,190	6,765	2,367	360	103	122	1,525	30,611

1/ No zone 2 forest land in Latah County.
HJP 3/15/39

RE-NRM
Forest Survey
Growth Phase

LATAH COUNTY

Table 42. - Net current annual board foot increment by type, species, and general size class.
National forest available, zone 1 1/
Thousands of board feet log scale, Scribner rule.

Forest type	Area (acres)	Species									
		Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Total
Seedling and sapling											
Western white pine	28,369										
Ponderosa pine	1,239										
Larch-Douglas fir	1,696										
Hemlock-white fir	48										
Douglas fir											
Lodgepole pine	264										
Cedar-white fir	67										
Total	31,683										
Pole											
Western white pine	24,160	479	16	288	272	319	80	48	16	80	1,598
Ponderosa pine	1,287	2	139	19	37	12				23	232
Larch-Douglas fir	6,070	14	9	136	228	23	23	4	4	14	455
Douglas fir											
Lodgepole pine	183										
Cedar-white fir	1,484	12	39	31	116	143	15		31		387
Total	33,184	507	203	474	653	497	118	52	51	117	2,672
Sawtimber											
Western white pine	1,543	228	24	81	67	57	9	5	5		476
Ponderosa pine	2,918	4	221	64	88	16	4			4	401
Larch-Douglas fir	9,038	62	125	831	748	270	21		21		2,078
Hemlock-white fir											
Douglas fir	96	2	2	3	19	3	1				30
Western red cedar											
Cedar-white fir	50			3	3	8	3	1	1		19
Total	13,645	296	372	982	925	354	38	6	27	4	3,004
Total											
Western white pine	54,072	707	40	369	339	376	89	53	21	80	2,074
Ponderosa pine	5,444	6	360	83	125	28	4			27	633
Larch-Douglas fir	16,804	76	134	967	976	293	44	4	25	14	2,533
Hemlock-white fir	48										
Douglas fir	96	2	2	3	19	3	1				30
Lodgepole pine	447										
Western red cedar											
Cedar-white fir	1,601	12	39	34	119	151	18	1	32		406
Total	78,512	803	575	1,456	1,578	851	156	58	78	121	5,676

1/ No zone 2 forest land in Latah County.

BB 3/15/39.

-50-62

RE-NRM
Forest Survey
Growth Phase

LATAH COUNTY

Table 43. - Net current annual cubic foot increment by type, species, and general size class.
Available lands other than national forest, zone 1 1/
Thousands of cubic feet.

Forest type	Species										
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Total
Seedling and sapling											
Western white pine	20,451	305.5	10.2	183.3	173.1	203.6	50.9	30.5	10.2	50.9	1,018.2
Ponderosa pine	15,322	9.8	589.0	78.5	157.1	49.1				98.2	981.7
Larch-Douglas fir	7,605	14.2	9.5	141.9	236.5	23.6	23.7	4.7	4.7	14.2	473.0
Hemlock-white fir	37			.1		.3					.4
Douglas fir	783	.6	1.1	2.2	20.0	2.7				.8	27.4
Lodgepole pine	837	.2	.2	.4	.7	.7			.1	5.0	7.3
Cedar-white fir	972	1.2	4.2	3.4	12.6	15.6	1.7		3.4		42.1
Total	46,007	331.5	614.2	409.8	600.0	295.6	76.3	35.2	18.4	169.1	2,550.1
Pole											
Western white pine	25,944	950.1	31.7	570.0	538.4	633.4	158.3	95.0	31.7	158.3	3,166.9
Ponderosa pine	65,866	35.4	2,122.7	283.0	566.0	176.9				353.8	3,537.8
Larch-Douglas fir	24,484	49.9	33.2	498.6	831.1	83.1	83.1	16.6	16.6	49.9	1,662.1
Douglas fir	928	1.1	2.3	4.6	42.0	5.8				1.7	57.5
Lodgepole pine	2,734	1.9	2.9	4.8	9.5	9.5			1.0	65.8	95.4
Cedar-white fir	261	.7	2.2	1.8	6.8	8.4	.9		1.8		22.6
Total	120,217	1,039.1	2,195.0	1,362.8	1,993.8	917.1	242.3	111.6	51.1	629.5	8,542.3
Sawtimber											
Western white pine	13,847	327.5	34.1	116.0	95.5	81.9	13.6	6.8	6.8		682.2
Ponderosa pine	38,475	6.8	376.3	109.5	150.5	27.4	6.8			6.8	684.1
Larch-Douglas fir	19,437	23.5	47.1	313.6	282.3	101.9	7.8		7.8		784.0
Hemlock-white fir	80		.2	.8	1.1	2.2					4.3
Douglas fir	30	.1	.1	.1	.8	.1					1.2
Western red cedar	35			.1	.2		.4				.7
Cedar-white fir	234			2.9	3.0	8.1	2.9	.9	.2		18.0
Total	72,138	357.9	457.8	543.0	533.4	221.6	31.5	7.7	14.8	6.8	2,174.5
Total											
Western white pine	60,242	1,583.1	76.0	869.3	807.0	918.9	222.8	132.3	48.7	209.2	4,867.3
Ponderosa pine	119,663	52.0	3,088.0	471.0	873.6	253.4	6.8			458.8	5,203.6
Larch-Douglas fir	51,526	87.6	89.8	954.1	1,349.9	208.6	114.6	21.3	29.1	64.1	2,919.1
Hemlock-white fir	117		.2	.9	1.1	2.5					4.7
Douglas fir	1,741	1.8	3.5	6.9	62.8	8.6				2.5	86.1
Lodgepole pine	3,571	2.1	3.1	5.2	10.2	10.2			1.1	70.8	102.7
Western red cedar	35			.1	.2		.4				.7
Cedar-white fir	1,467	1.9	6.4	8.1	22.4	32.1	5.5	.9	5.4		82.7
Total	238,362	1,728.5	3,267.0	2,315.6	3,127.2	1,434.3	350.1	154.5	84.3	805.4	13,266.9

1/ No zone 2 forest land in Latah County.
EB 3/14/39

RE-NRM
Forest Survey
Growth Phase

LATAH COUNTY

Table 44. - Net current annual cubic foot increment by type, species, and general size class.
National forest available, zone 1.[1/]
Thousands of cubic feet.

Forest type	Species										
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Total
Seedling and sapling											
Western white pine	28,369	270.7	9.0	162.5	153.4	180.5	45.1	27.1	9.0	45.1	902.4
Ponderosa pine	1,239	.8	46.4	6.2	12.4	3.8				7.7	77.3
Larch-Douglas fir	1,696	3.0	2.0	30.2	50.3	5.0	5.0	1.0	1.0	3.0	100.5
Hemlock-white fir	48			.1		.4					.5
Douglas fir											
Lodgepole pine	264	.1	.2	.4	.7	.7			.1	4.7	6.9
Cedar-white fir	67	.2	.5	.4	1.5	1.9	.2		.4		5.1
Total	31,683	274.8	58.1	199.8	218.3	192.3	50.3	28.1	10.5	60.5	1,092.7
Pole											
Western white pine	24,160	878.8	29.3	527.3	498.0	585.9	146.5	87.9	29.3	146.5	2,929.5
Ponderosa pine	1,287	.6	35.8	4.8	9.5	3.0				6.0	59.7
Larch-Douglas fir	6,070	13.0	8.6	129.6	216.1	21.6	21.6	4.3	4.3	13.0	432.1
Douglas fir											
Lodgepole pine	183	.1	.2	.3	.7	.6			.1	4.5	6.5
Cedar-white fir	1,484	4.1	13.5	10.8	40.6	50.1	5.4		10.8		135.3
Total	33,184	896.6	87.4	672.8	764.9	661.2	173.5	92.2	44.5	170.0	3,563.1
Sawtimber											
Western white pine	1,543	39.4	4.1	14.0	11.5	9.8	1.6	.8	.8		82.0
Ponderosa pine	2,918	.5	29.1	8.5	11.7	2.1	.5			.5	52.9
Larch-Douglas fir	9,038	11.2	22.4	149.1	134.2	48.4	3.7		3.7		372.7
Hemlock-white fir											
Douglas fir	96	.2	.3	.3	2.4	.4	.1				3.7
Western red cedar											
Cedar-white fir	50			.5	.5	1.4	.5	.2	.1		3.2
Total	13,645	51.3	55.9	172.4	160.3	62.1	6.4	1.0	4.6	.5	514.5
Total											
Western white pine	54,072	1,188.9	42.4	703.8	662.9	776.2	193.2	115.8	39.1	191.6	3,913.9
Ponderosa pine	5,444	1.9	111.3	19.5	33.6	8.9	.5			14.2	189.9
Larch-Douglas fir	16,804	27.2	33.0	308.9	400.6	75.0	30.3	5.3	9.0	16.0	905.3
Hemlock-white fir	48			.1		.4					.5
Douglas fir	96	.2	.3	.3	2.4	.4	.1				3.7
Lodgepole pine	447	.2	.4	.7	1.4	1.3			.2	9.2	13.4
Western red cedar											
Cedar-white fir	1,601	4.3	14.0	11.7	42.6	53.4	6.1	.2	11.3		143.6
Total	78,512	1,222.7	201.4	1,045.0	1,143.5	915.6	230.2	121.3	59.6	231.0	5,170.3

1/ No zone 2 forest land in Latah County.

RE-NRM
Forest Survey
Growth Phase

LEWIS COUNTY

Table 45. - Net current annual board foot increment by type, species, and general size class.
Available lands[1] zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species										
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Total
Seedling and sapling											
Ponderosa pine	16,947		27		10	1				1	39
Larch-Douglas fir	420			1	2						3
Douglas fir	2,884										
Lodgepole pine	125										
Total	20,376		27	1	12	1				1	42
Pole											
Ponderosa pine	14,829		1,160	17	437	34				34	1,682
Larch-Douglas fir	1,321		11	40	45	11			1	5	113
Douglas fir	4,393		5	3	42	1			1	4	56
Lodgepole pine	332										
Total	20,875		1,176	60	524	46			2	43	1,851
Sawtimber											
Ponderosa pine	31,042		2,706	253	541	72	36				3,608
Larch-Douglas fir	654		17	49	43	15			5		129
Douglas fir	485		8		34	1					43
Total	32,181		2,731	302	618	88	36		5		3,780
Total											
Ponderosa pine	62,818		3,893	270	988	107	36			35	5,329
Larch-Douglas fir	2,395		28	90	90	26			6	5	245
Douglas fir	7,762		13	3	76	2			1	4	99
Lodgepole pine	457										
Total	73,432		3,934	363	1,154	135	36		7	44	5,673

1/ No national forest land in Lewis County, Idaho.
BB 3/16/39

RE-NRM
Forest Survey
Growth Phase

LEWIS COUNTY

Table 46. - Net current annual cubic foot increment by type, species, and general size class.
Available lands[1] zones 1 and 2.
Thousands of cubic feet.

Forest type	Species										
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Total
Seedling and sapling											
Ponderosa pine	16,947		764.6	11.1	288.1	22.2				22.2	1,108.2
Larch-Douglas fir	420		2.3	8.2	9.3	2.3			.3	.9	23.3
Douglas fir	2,884		13.9	6.9	104.1	1.4			1.4	11.1	138.8
Lodgepole pine	125		.1	.1	.2	.3				.9	1.6
Total	20,376		780.9	26.3	401.7	26.2			1.7	35.1	1,271.9
Pole											
Ponderosa pine	14,829		572.5	8.3	215.7	16.6				16.6	829.7
Larch-Douglas fir	1,321		9.4	33.0	37.8	9.4			1.0	3.8	94.4
Douglas fir	4,393		17.1	8.6	128.4	1.7			1.7	13.7	171.2
Lodgepole pine	332		.6	.6	2.0	2.6				7.1	12.9
Total	20,875		599.6	50.5	383.9	30.3			2.7	41.2	1,108.2
Sawtimber											
Ponderosa pine	31,042		354.9	33.1	71.0	9.5	4.7				473.2
Larch-Douglas fir	654		2.3	6.6	5.8	2.1			.7		17.5
Douglas fir	485		2.5		11.0	.3					13.8
Total	32,181		359.7	39.7	87.8	11.9	4.7		.7		504.5
Total											
Ponderosa pine	62,818		1,692.0	52.5	574.8	48.3	4.7			38.8	2,411.1
Larch-Douglas fir	2,395		14.0	47.8	52.9	13.8			2.0	4.7	135.2
Douglas fir	7,762		33.5	15.5	243.5	3.4			3.1	24.8	323.8
Lodgepole pine	457		.7	.7	2.2	2.9				8.0	14.5
Total	73,432		1,740.2	116.5	873.4	68.4	4.7		5.1	76.3	2,884.6

[1] No national forest land in Lewis County, Idaho.
BB 3/16/39

RE-NRM
Forest Survey
Growth Phase

NEZ PERCE COUNTY

Table 47. - Net current annual board foot increment by type, species, and general size class.
Available lands, 1/ zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species										
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Total
Seedling and sapling											
Ponderosa pine	5,193										
Larch-Douglas fir	2,387										
Hemlock-white fir	67										
Douglas fir	1,170										
Lodgepole pine	3,367										
Total	12,184										
Pole											
Ponderosa pine	27,736		2,973	43	1,121	86				86	4,309
Larch-Douglas fir	1,960		25	86	99	25			2	10	247
Hemlock-white fir	1,052		1	1	3	9			1		15
Douglas fir	1,241										
Lodgepole pine	591										
Total	32,580		2,999	130	1,223	120			3	96	4,571
Sawtimber											
Ponderosa pine	36,453		2,654	351	702	156		39			3,902
Larch-Douglas fir	7,019		148	430	511	201		54			1,344
Hemlock-white fir	53		1		3	8		1			13
Douglas fir	364		4		21	4		1			30
Total	43,889		2,807	781	1,237	369		95			5,289
Total											
Ponderosa pine	69,382		5,627	394	1,823	242		39		86	8,211
Larch-Douglas fir	11,366		173	516	610	226		54	2	10	1,591
Hemlock-white fir	1,172		2	1	6	17		1	1		28
Douglas fir	2,775		4		21	4		1			30
Lodgepole pine	3,958										
Total	88,653		5,806	911	2,460	489		95	3	96	9,860

1/ No national forest land in Nez Perce County, Idaho.
BB 3/16/39.

RE-NRM
Forest Survey
Growth Phase

NEZ PERCE COUNTY

Table 48. - Net current annual cubic foot increment by type, species, and general size class.
Available lands,[1] zones 1 and 2.
Thousands of cubic feet.

Forest type	Species										
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Total
Seedling and sapling											
Ponderosa pine	5,193		235.2	3.4	88.6	6.8				6.8	340.8
Larch-Douglas fir	2,387		10.9	38.2	43.6	10.9			1.1	4.4	109.1
Hemlock-white fir	67		.4	.1	.9	2.6			.3	.1	4.4
Douglas fir	1,170		4.5	2.3	34.1	.5			.5	3.6	45.5
Lodgepole pine	3,367		3.9	3.9	11.8	15.7				43.2	78.5
Total	12,184		254.9	47.9	179.0	36.5			1.9	58.1	578.3
Pole											
Ponderosa pine	27,736		985.3	14.3	371.3	28.6				28.6	1,428.1
Larch-Douglas fir	1,960		11.6	40.7	46.6	11.6			1.2	4.7	116.4
Hemlock-white fir	1,052		10.0	3.3	22.2	65.0	.6		7.8	2.2	111.1
Douglas fir	1,241		4.5	2.2	33.8	.4			.5	3.6	45.0
Lodgepole pine	591		1.2	1.2	3.4	4.6				12.6	23.0
Total	32,580		1,012.6	61.7	477.3	110.2	.6		9.5	51.7	1,723.6
Sawtimber											
Ponderosa pine	36,453		355.3	47.0	94.1	20.9		5.2			522.5
Larch-Douglas fir	7,019		23.1	67.1	79.6	31.4		8.4			209.6
Hemlock-white fir	53		.2	.1	.6	1.5		.2			2.6
Douglas fir	364		1.3		6.1	1.1		.4			8.9
Total	43,889		379.9	114.2	180.4	54.9		14.2			743.6
Total											
Ponderosa pine	69,382		1,575.8	64.7	554.0	56.3		5.2		35.4	2,291.4
Larch-Douglas fir	11,366		45.6	146.0	169.8	53.9		8.4	2.3	9.1	435.1
Hemlock-white fir	1,172		10.6	3.5	23.7	69.1	.6	.2	8.1	2.3	118.1
Douglas fir	2,775		10.3	4.5	74.0	2.0		.4	1.0	7.2	99.4
Lodgepole pine	3,958		5.1	5.1	15.2	20.3				55.8	101.5
Total	88.653		1,647.4	223.8	836.7	201.6	.6	14.2	11.4	109.8	3,045.5

1/ No national forest land in Nez Perce County, Idaho.

BB. 3/16/39

RE-NRM
Forest Survey
Growth Phase

SHOSHONE COUNTY

Table 49. - Net current annual board foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species											
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Alpine fir	Total
Seedling and sapling												
Western white pine	108,075											
Ponderosa pine	2,708											
Larch-Douglas fir	11,347											
Hemlock-white fir	644											
Douglas fir	3,929											
Engelmann spruce	325											
Lodgepole pine	9,723											
Western red cedar												
Total	136,751											
Pole												
Western white pine	59,401	1,810	60	1,086	1,026	1,177	302	181	60	302	30	6,034
Ponderosa pine	14,072	27	1,604	214	427	134				267		2,673
Larch-Douglas fir	8,952	33	22	328	547	55	55	11	11	33		1,095
Hemlock-white fir	55			4	2	13	1		2			22
Douglas fir	8,782	12	23	46	422	58				17		578
Engelmann spruce	86	3		6	4	4	1	1	30	1	1	51
Lodgepole pine	1,032	1	2	3	6	6				41		59
Cedar-white fir	648	2	8	6	23	28	3		6			76
Total	93,028	1,888	1,719	1,693	2,457	1,475	362	193	109	661	31	10,588
Sawtimber												
Western white pine	40,460	8,157		1,950	2,128	2,305	887	532	1,418	355		17,732
Ponderosa pine	5,314	17	347	68	125	11						568
Larch-Douglas fir	24,411	196	49	2,354	1,422	392	98	147	147	98		4,903
Hemlock-white fir	83			3	3	8	1	6	1			22
Douglas fir	2,544	51		15	377	61			5			509
Engelmann spruce	379	4		12	7	6	1	6	67	1		104
Lodgepole pine	282	3		6	4					16		29
Western red cedar												
Cedar-white fir	3						1					1
Total	73,496	8,428	396	4,408	4,066	2,783	988	691	1,638	470		23,868
Total												
Western white pine	207,956	9,967	60	3,036	3,154	3,482	1,189	713	1,478	657	30	23,766
Ponderosa pine	22,094	44	1,951	282	552	145				267		3,241
Larch-Douglas fir	44,710	229	71	2,682	1,969	447	153	158	158	131		5,998
Hemlock-white fir	782			7	5	21	2	6	3			44
Douglas fir	15,255	63	23	61	799	119			5	17		1,087
Engelmann spruce	790	7		18	11	10	2	7	97	2	1	155
Lodgepole pine	11,037	4	2	9	10	6				57		88
Western red cedar												
Cedar-white fir	651	2	8	6	23	28	4		6			77
Total	303,275	10,316	2,115	6,101	6,523	4,258	1,350	884	1,747	1,131	31	34,456

HJP 3/17/39

RE-NRM
Forest Survey
Growth Phase

SHOSHONE COUNTY

Table 50. - Net current annual board foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of board feet log scale, Scribner rule.

Forest type	Species											
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Alpine fir	Total
Seedling and sapling												
Western white pine	242,578											
Ponderosa pine	11,057	1	59	8	15	5				10		98
Larch-Douglas fir	37,883			2	2							4
Hemlock-white fir	384											
Douglas fir	7,931				1							1
Engelmann spruce	2,466											
Lodgepole pine	59,509											
Western red cedar	138											
Total	361,946	1	59	10	18	5				10		103
Pole												
Western white pine	82,324	3,890	130	2,334	2,205	2,529	648	389	130	648	65	12,968
Ponderosa pine	8,660	18	1,072	143	286	89				179		1,787
Larch-Douglas fir	17,295	56	37	556	926	93	93	18	18	55		1,852
Hemlock-white fir	1,271	2		37	14	118	6	2	14	4		197
Douglas fir	17,158	30	62	123	1,123	154				46		1,538
Engelmann spruce	1,870	18		53	28	25	7	4	212	4	3	354
Lodgepole pine	13,921	20	30	51	101	101			10	697		1,010
Cedar-white fir	241	1	1	1	4	5	1		1			14
Total	142,740	4,035	1,332	3,298	4,687	3,114	755	413	385	1,633	68	19,720
Sawtimber												
Western white pine	116,052	22,597		5,404	5,895	6,386	2,456	1,474	3,930	982		49,124
Ponderosa pine	1,480	6	130	25	47	4						212
Larch-Douglas fir	25,308	230	58	2,759	1,667	460	115	172	172	115		5,748
Hemlock-white fir	1,081	2	2	28	24	71	10	55	10			202
Douglas fir	23,934	384		115	2,842	461			38			3,840
Engelmann spruce	4,684	58		158	101	86	15	86	919	14		1,437
Lodgepole pine	3,780	33		70	48	7		4	7	199		368
Western red cedar	244	1		8	4	6	46	1	6			72
Cedar-white fir	287	1		4	3	13	19	1	4			45
Total	176,850	23,312	190	8,571	10,631	7,494	2,661	1,795	5,086	1,310		61,048
Total												
Western white pine	440,954	26,487	130	7,738	8,100	8,915	3,104	1,863	4,060	1,630	65	62,092
Ponderosa pine	21,197	25	1,261	176	348	98				189		2,097
Larch-Douglas fir	80,486	286	95	3,317	2,595	553	208	190	190	170		7,604
Hemlock-white fir	2,736	4	2	65	38	189	16	57	24	4		399
Douglas fir	49,023	414	62	238	3,966	615			38	46		5,379
Engelmann spruce	9,020	76		211	129	111	22	90	1,131	18	3	1,791
Lodgepole pine	77,210	53	30	121	149	108		4	17	896		1,378
Western red cedar	382	1		8	4	6	46	1	6			72
Cedar-white fir	528	2	1	5	7	18	20	1	5			59
Total	681,536	27,348	1,581	11,879	15,336	10,613	3,416	2,206	5,471	2,953	68	80,871

HJP & BB 3/20/39

RE-NRM
Forest Survey
Growth Phase

SHOSHONE COUNTY

Table 51. - Net current annual cubic foot increment by type, species, and general size class.
Available lands other than national forest, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species											
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Alpine fir	Total
Seedling and sapling												
Western white pine	108,075	1,192.4	39.8	715.4	675.7	775.1	198.7	119.2	39.8	198.7	19.9	3,974.7
Ponderosa pine	2,708	1.6	96.9	12.9	25.8	8.1				16.2		161.5
Larch-Douglas fir	11,347	21.8	14.5	217.6	362.8	36.3	36.3	7.2	7.2	21.8		725.5
Hemlock-white fir	644	.5		9.6	3.5	30.1	1.5	.5	3.5	1.0		50.2
Douglas fir	3,929	4.2	8.3	16.6	151.8	20.8				6.2		207.9
Engelmann spruce	325	1.3		3.7	2.0	1.8	.5	.2	14.9	.2	.2	24.8
Lodgepole pine	9,723	3.1	4.7	7.9	15.8	15.8			1.6	108.9		157.8
Western red cedar												
Total	136,751	1,224.9	164.2	983.7	1,237.4	888.0	237.0	127.1	67.0	353.0	20.1	5,302.4
Pole												
Western white pine	59,401	2,212.4	73.8	1,327.4	1,253.7	1,438.1	368.7	221.2	73.8	368.7	36.9	7,374.7
Ponderosa pine	14,072	6.0	361.5	48.2	96.4	30.1				60.2		602.4
Larch-Douglas fir	8,952	17.6	11.7	176.0	293.4	29.3	29.3	5.9	5.9	17.6		586.7
Hemlock-white fir	55			1.0	.4	3.1	.1		.4	.1		5.1
Douglas fir	8,782	11.6	23.2	46.4	423.3	58.0				17.4		579.9
Engelmann spruce	86	.3		1.1	.6	.5	.1	.1	4.3	.1	.1	7.2
Lodgepole pine	1,032	.7	1.1	1.7	3.5	3.5			.4	24.1		35.0
Cedar-white fir	648	1.0	3.3	2.6	9.7	12.0	1.3		2.6			32.5
Total	93,028	2,249.6	474.6	1,604.4	2,081.0	1,574.6	399.5	227.2	87.4	488.2	37.0	9,223.5
Sawtimber												
Western white pine	40,480	1,297.0		310.2	338.3	366.5	141.0	84.6	225.6	56.4		2,819.6
Ponderosa pine	5,314	2.5	51.0	10.0	18.4	1.7						83.6
Larch-Douglas fir	24,411	39.1	9.8	469.5	283.7	78.2	19.6	29.3	29.3	19.6		978.1
Hemlock-white fir	83			.6	.6	1.7	.2	1.3	.2			4.6
Douglas fir	2,544	9.4		2.8	70.0	11.4			.9			94.5
Engelmann spruce	379	.2		2.1	1.3	1.1	.2	1.1	12.1	.2		18.9
Lodgepole pine	282	.7		1.4	.9	.1		.1	.1	4.0		7.3
Western red cedar												
Cedar-white fir	3					.1	.1					.2
Total	73,496	1,349.5	60.8	796.6	713.2	460.8	161.1	116.4	268.2	80.2		4,006.8
Total												
Western white pine	207,956	4,701.8	113.6	2,353.0	2,267.7	2,579.7	708.4	425.0	339.2	623.8	56.8	14,169.0
Ponderosa pine	22,094	10.1	509.4	71.1	140.6	39.9				76.4		847.5
Larch-Douglas fir	44,710	78.5	36.0	863.1	939.9	143.8	85.2	42.4	42.4	59.0		2,290.3
Hemlock-white fir	782	.5		11.2	4.5	34.9	1.8	1.8	4.1	1.1		59.9
Douglas fir	15,255	25.2	31.5	65.8	645.1	90.2			.9	23.6		882.3
Engelmann spruce	790	2.4		6.9	3.9	3.4	.8	1.4	31.3	.5	.3	50.9
Lodgepole pine	11,037	4.5	5.8	11.0	20.2	19.4		.1	2.1	137.0		200.1
Western red cedar												
Cedar-white fir	651	1.0	3.3	2.6	9.7	12.1	1.4		2.6			32.7
Total	305,275	4,824.0	699.6	3,384.7	4,031.6	2,923.4	797.6	470.7	422.6	921.4	57.1	18,532.7

HJP 3/17/39

RE-NRM
Forest Survey
Growth Phase

SHOSHONE COUNTY

Table 52. - Net current annual cubic foot increment by type, species, and general size class.
National forest available, zones 1 and 2.
Thousands of cubic feet.

Forest type	Species											
	Area (acres)	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Western hemlock	Engelmann spruce	Lodgepole pine	Alpine fir	Total
Seedling and sapling												
Western white pine	242,578	1,473.8	49.1	884.3	835.1	957.9	245.6	147.4	49.1	245.6	24.6	4,912.5
Ponderosa pine	11,057	6.2	374.1	49.9	99.8	31.2				62.3		623.5
Larch-Douglas fir	37,883	59.9	40.0	599.5	999.1	99.9	99.9	20.0	20.0	60.0		1,998.3
Hemlock-white fir	384	.3		5.6	2.1	17.6	.9	.3	2.0	.6		29.4
Douglas fir	7,931	8.5	16.9	33.8	308.6	42.3				12.7		422.8
Engelmann spruce	2,466	2.2		6.7	3.6	3.1	.9	.5	26.9	.5	.4	44.8
Lodgepole pine	59,509	16.5	24.7	41.2	82.4	82.3			8.2	568.2		823.5
Western red cedar	138			.1	.1	.1	.6		.1			1.0
Total	361,946	1,567.4	504.8	1,621.1	2,330.8	1,234.4	347.9	168.2	106.3	949.9	25.0	8,855.8
Pole												
Western white pine	82,324	2,810.0	93.7	1,686.0	1,592.3	1,826.5	468.3	281.0	93.7	468.3	46.8	9,366.6
Ponderosa pine	8,660	3.9	231.9	30.9	61.9	19.3				38.7		386.6
Larch-Douglas fir	17,295	32.8	21.9	328.2	547.1	54.7	54.7	11.0	10.9	32.8		1,094.1
Hemlock-white fir	1,271	1.1		20.3	7.5	64.2	3.2	1.1	7.5	2.1		107.0
Douglas fir	17,158	21.1	42.2	84.4	769.9	105.5				31.6		1,054.7
Engelmann spruce	1,870	10.2		30.7	16.4	14.3	4.1	2.0	122.8	2.1	2.0	204.6
Lodgepole pine	13,921	8.4	12.6	21.1	42.2	42.2			4.2	291.0		421.7
Cedar-white fir	241	.5	1.6	1.2	4.6	5.7	.6		1.2			15.4
Total	142,740	2,888.0	403.9	2,202.8	3,041.9	2,132.4	530.9	295.1	240.3	866.6	48.8	12,650.7
Sawtimber												
Western white pine	116,052	3,881.8		928.2	1,012.6	1,097.0	421.9	253.2	675.1	168.8		8,438.6
Ponderosa pine	1,480	.8	15.4	3.0	5.6	.5						25.3
Larch-Douglas fir	25,308	40.0	10.0	479.7	289.8	79.9	20.0	30.0	30.0	20.0		999.4
Hemlock-white fir	1,081	.5	.5	6.7	5.8	16.8	2.4	13.0	2.4			48.1
Douglas fir	23,934	79.6		23.9	589.0	95.5			8.0			796.0
Engelmann spruce	4,684	10.6		29.1	18.5	15.9	2.6	15.8	169.2	2.6		264.3
Lodgepole pine	3,780	8.8		18.7	12.8	2.0		1.0	1.9	53.1		98.3
Western red cedar	244	.3		1.5	.7	1.1	8.9	.1	1.2			13.8
Cedar-white fir	287	.3		1.5	1.2	4.7	7.0	.5	1.5			16.7
Total	176,850	4,022.7	25.9	1,492.3	1,936.0	1,313.4	462.8	313.6	889.3	244.5		10,700.5
Total												
Western white pine	440,954	8,165.6	142.8	3,498.5	3,440.0	3,881.4	1,135.8	681.6	817.9	882.7	71.4	22,717.7
Ponderosa pine	21,197	10.9	621.4	83.8	167.3	51.0				101.0		1,035.4
Larch-Douglas fir	80,486	132.7	71.9	1,407.4	1,836.0	234.5	174.6	61.0	60.9	112.8		4,091.8
Hemlock-white fir	2,736	1.9	.5	32.6	15.4	98.6	6.5	14.4	11.9	2.7		184.5
Douglas fir	49,023	109.2	59.1	142.1	1,667.5	243.3			8.0	44.3		2,273.5
Engelmann spruce	9,020	23.0		66.5	38.5	33.3	7.6	18.3	318.9	5.2	2.4	513.7
Lodgepole pine	77,210	33.7	37.3	81.0	137.4	126.5		1.0	14.3	912.3		1,343.5
Western red cedar	382	.3		1.6	.8	1.2	9.5	.1	1.3			14.8
Cedar-white fir	528	.8	1.6	2.7	5.8	10.4	7.6	.5	2.7			32.1
Total	681,536	8,478.1	934.6	5,316.2	7,308.7	4,680.2	1,341.6	776.9	1,235.9	2,061.0	73.8	32,207.0

HJP & BB 3/18/39.

-9-72

Survey type number	Forest Type[1/] Definitions
	WESTERN WHITE PINE: Forest containing 15 percent or more of western white pine.
1	Sawtimber: Averaging 4 M board feet or more per acre.
1a	Pole: Trees averaging 5 inches to 11 inches d.b.h.
1b	Seedling & sapling: Trees averaging less than 5 inches d.b.h.
	PONDEROSA PINE: Forest containing 25 percent or more of ponderosa pine.
2	Sawtimber: Averaging 3 M board feet or more per acre.
2a	Pole: Trees averaging 5 inches to 11 inches d.b.h.
2b	Seedling & sapling: Trees averaging less than 5 inches d.b.h.
	LARCH-DOUGLAS-FIR: Forest containing 10 percent or more of western larch and 75 percent or more of larch and Douglas-fir combined.
3	Sawtimber: Averaging 4 M board feet or more per acre.
3a	Pole: Trees averaging 5 inches to 13 inches d.b.h.
3b	Seedling and sapling: Trees averaging less than 5 inches d.b.h.
	HEMLOCK-WHITE FIR: Forest containing 50 percent or more of western hemlock and/or lowland white fir.
4	Sawtimber: Averaging 4 M board feet or more per acre.
4a	Pole: Trees averaging 5 inches to 13 inches d.b.h.
4b	Seedling and sapling: Trees averaging less than 5 inches d.b.h.
	DOUGLAS-FIR: Forest containing 60 percent or more of Douglas-fir.
5	Sawtimber: Trees averaging 4 M board feet or more per acre.
5a	Pole: Averaging 5 inches to 13 inches d.b.h.
5b	Seedling and sapling: Trees averaging less than 5 inches d.b.h.
	ENGELMANN SPRUCE: Forest containing 50 percent or more of Engelmann spruce.
6	Sawtimber: Averaging 4 M board feet or more per acre.
6a	Pole: Trees averaging 5 inches to 13 inches d.b.h.
6b	Seedling and sapling: Trees averaging less than 5 inches d.b.h.
	LODGEPOLE PINE: Forest containing 50 percent or more of lodgepole pine.
7	Sawtimber: Averaging 3 M board feet or more per acre.
7a	Pole: Trees averaging 5 inches to 11 inches d.b.h.
7b	Seedling and sapling: Trees averaging less than 5 inches d.b.h.

1/ Classification of sawtimber stands is based on present board-foot volume composition exclusive of board-foot volume in cedar poles; classification of pole, seedling and sapling is based on estimated board-foot volume composition at maturity. Minimum board-foot volume requirements are totals of all species. Minimum size of sawtimber trees is more than 11 inches d.b.h. for western white pine, ponderosa pine, lodgepole pine, western redcedar, and more than 13 inches d.b.h. for all other species. The white pine classification was given priority over all others; the ponderosa pine classification was given priority over all but the white pine classification.

Survey type number	Forest Type Definitions
	WESTERN REDCEDAR: Forest in which western redcedar predominates.
8	Large sawtimber: 4 M board feet or more in trees larger than 23 inches d.b.h. and less than 8 cedar poles per acre.
8a	Small sawtimber: Trees averaging 11 inches to 23 inches d.b.h.; 8 or more cedar poles per acre.
8b	Pole, seedling and sapling: Trees averaging less than 11 inches d.b.h.
	CEDAR-WHITE FIR: Forest in which lowland white fir and cedar predominate.
9	Large sawtimber: 4 M board feet or more in trees larger than 23 inches d.b.h. and less than 8 cedar poles per acre.
9a	Small sawtimber: Trees averaging 11 inches to 23 inches d.b.h.; 8 or more cedar poles per acre.
9b	Pole: Trees averaging 5 inches to 11 inches d.b.h.
9c	Seedling and sapling: Trees averaging less than 5 inches d.b.h.
	NONRESTOCKED CUTOVER: Unimproved, logged areas averaging less than 3 or 4 M board feet per acre, and less than 10 percent stocked with poles and/or seedling and saplings, at the time of mapping.
13	Cutover prior to January 1925.
14	Cutover since January 1925: includes some clear-cut areas unclassified as to restocking conditions.
	NONRESTOCKED BURN: Unimproved lands deforested by fire and not restocked at time of mapping.
15	Burned prior to January 1925.
16	Burned since January 1925.
11	SUBALPINE: Noncommercial forest at upper limits of tree growth.
22	JUNIPER: Forest containing 80 percent or more of Rocky Mountain juniper.
23	NONCOMMERCIAL ROCKY AREA: Noncommercial forest within the commercial forest zone.